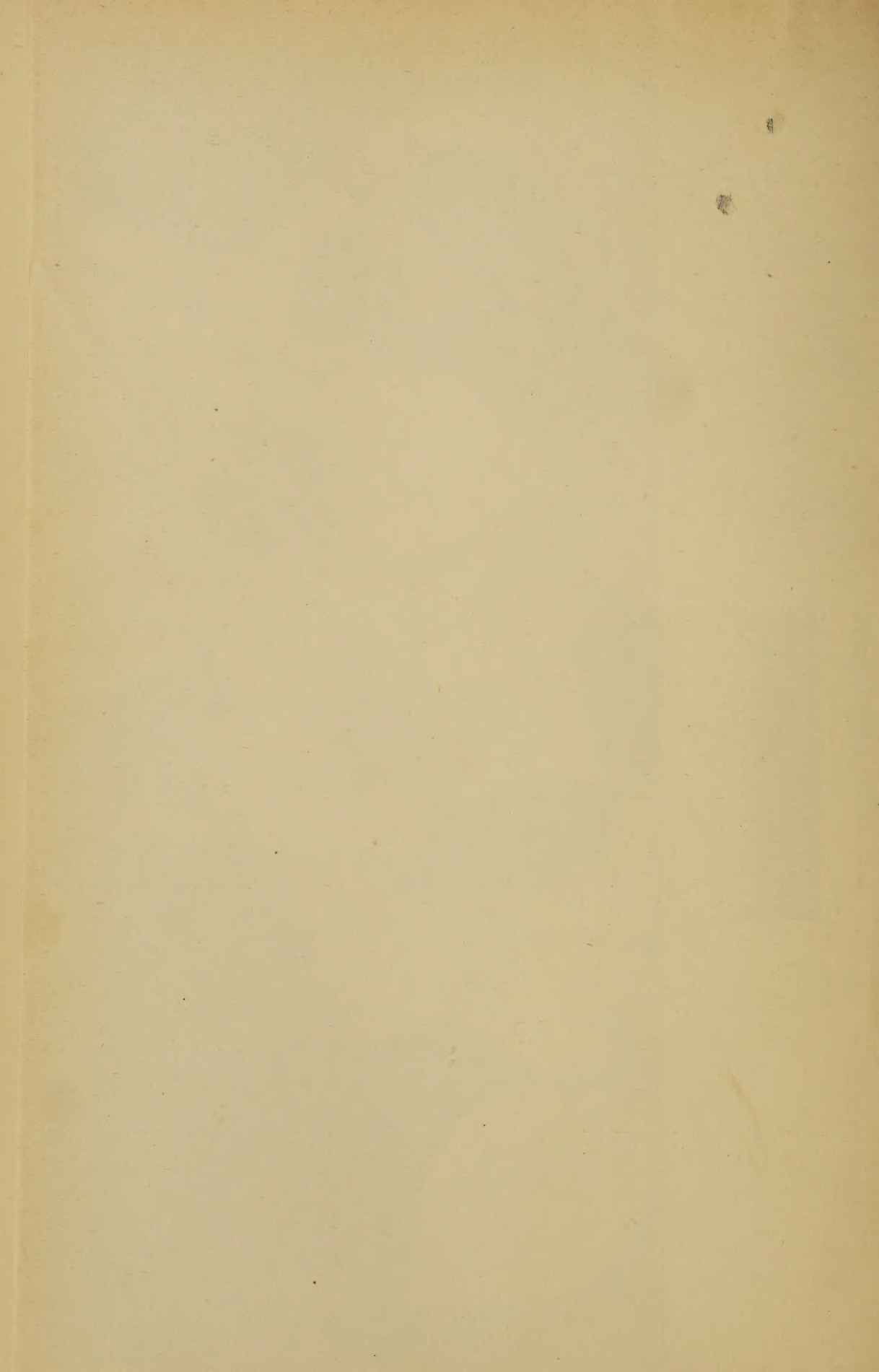


Historic, Archive Document

Do not assume content reflects current scientific knowledge, policies, or practices.







NOVEMBER, 1884.

NEW VARIETIES OF FRUITS continue to be presented to the public in rapid succession. Exactly what position each is to occupy eventually can be determined only after several years of trial. Judging, however, from the past it may very confidently be predicted that a large proportion of them will in time be neglected on account of some inherent defects. Undoubtedly the new fruits now sent out are of higher average merit than those of twenty-five years since, but they are also judged by a higher standard, and probably not more now than then will have value sufficient to give them permanence in cultivation. Although many of these new varieties are chance seedlings, that intelligent cultivators have discovered and appreciated, many others are the direct result of intentional cross-breeding and hybridizing. Experience has conclusively proved that no one variety of fruit can combine all the best qualities. With great hardiness and productiveness of the plant we must expect only a medium quality of fruit. A plant that, by constitution, is adapted to a great variety of soils and climates, such as are found in this country, and is sufficiently productive to be valuable, will produce fruit only of moderate quality. Familiar examples may be noticed, as the Wilson and Crescent Strawberries, the Turner and the Philadelphia Raspberries, the

Concord Grape, the Baldwin Apple, &c.

In connection with a fruit of high quality we must, as a rule, and probably as a certainty, expect a defect in hardiness or productiveness, or both. But localities and climates are so various that we find a wonderful difference in the capabilities of our fruit-bearing plants, vines and trees, according to their location; and the more favorable a locality may be for raising a particular kind of fruit, or, in other words, the less the necessity to demand hardiness in a variety, in so much higher proportion may we expect to combine quality and productiveness. Our people are not satisfied with the attainment already made in fruit culture, and the constant supply of new varieties is but the response to the popular demand. Many who make trials of new varieties are often sadly disappointed, and not unfrequently blame, without justice, the originators or the parties who send them out.

In a country like ours, possessed as it is of the greatest variations of climate, one has a right to expect only a few out many varieties of excellence to prove valuable in his particular case. Our advice to every one in regard to trying new fruits is simply this: If you are not willing to test a new variety with the hope of obtaining something superior, but with the distinct understanding that it probably will not prove equal to the

best you now have, it will be better for you to allow your neighbor, with a more philosophical cast of mind, to make the test, while you content yourself with what has already been proved. But there is a charm in testing new varieties that are fairly promising that the wide awake fruit-grower cannot wholly resist; and it is well that it is so, for there is a positive advance in the character of our fruits, and although the movement is so slow that it may not be noticeable from year to year, yet a decade, or a quarter of a century, reveals it most clearly. New varieties of the small fruits and of Grapes are numerous, and our readers are kept advised of their advent as they appear.

The Garretson Strawberry is one of the latest appearances. It originated at Flushing, N. Y. It is described as a vigorous grower, pistillate, an abundant bearer of berries of uniform large size, bright crimson color, and of good quality, very firm, bearing handling well. The originator, G. R. GARRETSON, is an experienced cultivator, and is confident that he is offering the public a valuable fruit. Of the truth of the matter the public will probably be better informed a few years hence; but the new berry should be welcomed.

Connecticut Queen is a Strawberry recommended especially for its productiveness, though its other desirable qualities are said to rank sufficiently high.

The Parry, a Strawberry originated by the well known horticulturist, WM. PARRY, of New Jersey, is highly recommended. The description given of it is as follows: "The plant is a rank, vigorous grower; blossom perfect, very productive, fruit-stalks large and stocky. Berries large, uniform in size and shape, bright crimson color, and very attractive in the box. Quality best."

The merits of these varieties, and very many others, so far as the great public is concerned, are yet to be ascertained, and at least for the next three years they may be considered as on trial. Next season, from a dozen to a score of newer varieties, already heralded, will probably be publicly announced. In the meantime, the clear headed, practical cultivator will make his new plantations of those well-proved varieties of which he has positive knowledge.

As an illustration of the difficulty of ar-

riving at a just estimate of a new variety of fruit, we may mention the case of the James Vick Strawberry. This variety was quite widely planted in the spring of 1883, and it was hoped that this year its true character and its adaptability to various localities might be well known. Strange to say, the reports in regard to it are most dissimilar and contradictory. Why this should be so appears at first sight unaccountable. But let us examine some of the reports.

J. T. LOVETT, in a communication to *The Farm and Garden*, in August, said: "James Vick proves very much like Capt. Jack, only more so, *i. e.*, it overloads itself with fruit; although distinct from Capt. Jack, it has a strong resemblance to that old chieftain in both plant and fruit. I saw it in bearing on different kinds of soil throughout New Jersey and in the West, and unless it does better in the future it must become a thing of the past."

This is quite different from Mr. LOVETT's account of this variety the year before. Mr. CHARLES A. GREEN, who first sent out the James Vick, wrote to us in the summer of 1883, as follows: "Mr. JOHN T. LOVETT, of New Jersey, writes me that the James Vick has exceeded his expectations; that it is as productive as Crescent, and firmer, and keeps longer after ripening, that the form and color are fine, and the plant perfection. He says it must occupy a high position as a market berry." Mr. LOVETT not only has a right to change his opinion, but he should do so when he finds it to be wrong. It is only surprising that a fruit grower of his experience should express himself so confidently of a new fruit upon evidence that is apparently so easily reversible.

J. W. KERR writes to the *American Farmer*, of Baltimore, in July, as follows: "In small fruits, this season's observation leads one to regard the Manchester Strawberry as virtually without a place, as it is superior in neither size, color, productiveness, quality or hardiness of plant to the Cumberland, while the latter has the telling advantage of perfect blossoms. Then, too, the James Vick—for which the most extravagant claims were made by its disseminators—is too late in ripening 'by a large majority' to be of much value here, as it will have to compete with Jer-

sey berries, grown nearer market; and Strawberry growers on the peninsula all know what it means when Jersey berries are ready for market."

In this case Manchester, which has stood some excellent tests, and is approved by many of the best cultivators, is dealt a heavy blow in common with the James Vick. The latter variety is disapproved because it is late in ripening. Strange to say, this character of late ripening is one for which both the Manchester and the James Vick have been recommended, as the Strawberry season can thereby be prolonged. A late variety may not be what "Strawberry growers on the peninsula" want, and we understand Mr. K. to speak only for them. Nevertheless such a variety is wanted by all private growers, and by market growers in some localities.

The *Farm and Home*, in its September issue, publishes some notes by L. W. GOODELL, in which he says: "It is to be regretted that the name of so good a man as JAMES VICK was attached to such a poor, sour berry. In growth and healthiness the plant is all that can be desired. It gives promise of a big crop of fruit when in blossom, but many of the blossoms prove abortive, and while the first berries are of fair size, they dwindle down to almost nothing at the last picking, and it is too acid to ever become popular."

Much to the same import, GEO. J. KELLOGG writes to the *Western Rural*, that, "It promises a very heavy crop, and gives a moderate crop of medium-sized berries."

If this plant promises so much and produces so little have we not reason to suspect that its requirements are not met? On page 255 of our last volume, we wrote, "the James Vick has, this season, maintained its reputation for a great yield. The berries are only of medium size, of a rich, high color, not of high flavor, and each plant produces a great number of berries. It appears probable that this variety cultivated in single hills on rich soil will be capable of yielding enormously, especially if provided with sufficient water."

We think the secret in the successful cultivation of this plant is high cultivation. It needs a strong and rich soil and plenty of water to enable it to perfect the fruit it car-

ries. To corroborate this view, we give here the experience of W. W. HILBORN, which was published in the *Farmer's Advocate*, of London, Ont.: "After fruiting this variety this very unfavorable season (it has been very dry all the time from early spring until after the fruit was gathered) we have been favorably disappointed as to its size. It has averaged fully as large as Wilson, and produced more fruit. By keeping it in narrow rows and giving good cultivation it will produce a wonderful crop of fruit, of fine, regular form, and ripens so much at once that they can be picked very fast. The plant is a model of perfection in growth and hardiness. It is doubtful if it has an equal in this respect; ripens quite late; a good market sort, but if left to grow in very wide rows it does not bring its crop to perfection, as it sets more fruit than any other sort we have grown." So it appears that the plant, with good cultivation, will perfect a large crop, even in a drought. What would the crop be with an abundant supply of water!

W. F. GALE, of West Springfield, Mass., wrote to the *Farm and Home*, last month, "James Vick also yields a great quantity of medium-sized fruit; the quality is first rate."

ROBERT JOHNSTON, the well known fruit grower of Ontario County, in this State, published in his *Fruit Notes*, the following: "James Vick is a marvel for productiveness; don't know but the picture is right after all. It suffered greatly from the frost, and on the whole we do not think we are prepared to judge fairly of its merits. Vigorous in plant, and profuse in bud and bloom, it seemingly can lack only size, if anything."

Our own opinion of this variety, after this season's experience with it, was given on page 248 of this MAGAZINE, and there is no occasion to repeat it here. We there stated, in substance, that we thought it a valuable variety either for the private grower or for market. We have no reason to change this opinion, but would qualify it to the extent that as a market variety it will be valuable only where a late berry is profitable. In view of our introductory remarks one cannot reasonably infer that we consider it desirable everywhere and under all conditions. On the other hand the characteristics of the fruit are such that it can exhibit itself

to the best advantage only in strong soils and with high cultivation, and the variety of experiences we have here given, no doubt, depend upon differences in soils and cultivation.

Personally, we have no pecuniary interest in the James Vick Strawberry. Its name was bestowed, as most of our readers are aware, by the party who first sent it out. We desire that it shall be judged by its merits, as it surely will be, and know that upon these its fate will depend, whether it be prematurely praised or condemned. Another year it will be better known.

Among the new Raspberries, the Marlboro stands, no doubt, deservedly very high, and it probably has a great future. WM. H. MOON, of Morrisville, Pa., now introduces the Rancocas Raspberry, a red variety, which will prove, it is thought, of great merit as a market berry, as it is early, very productive, and bears shipping unusually well. It has been styled the "busy man and the lazy man's berry," but, how truly, the future may reveal.

The principal promising varieties of Blackberries that yet await a general test are Early Cluster, Early Harvest, Wilson Junior, and Minnewaska.

The new varieties of Grapes are in strong force. The Niagara, which has heretofore been withheld from sale, is to be disposed of without restrictions, and those who want it can purchase it at its price. Another season's test confirms us in the opinion that the Pocklington, which rivals the Niagara in color, size, productiveness, hardiness, &c., is somewhat better in quality. The Empire State will be rather widely distributed and planted the coming spring, and eventually will probably be highly prized. All of these, with the Hayes and the Duchess, and the older white varieties, in a short time will afford a market supply of all the white Grapes that may be desired.

Of new red varieties, A. J. CAYWOOD'S Poughkeepsie Red and Ulster Prolific are of the highest promise. These are now offered for the first time to the public, and will be sent out in the spring.

But the varieties yet unannounced, that are biding their time to appear, if we could only know of them all, would probably appear a wonderful company. Mr. JACOB MOORE, the originator of the Brighton, has offered for our

inspection two new varieties that have some excellent qualities. As in the case of the Brighton, his later varieties have been produced by careful crossing and recrossing, requiring years to reach the result attained. The most promising one has an ancestry of Delaware, Concord and Iona. But it is not our purpose now to describe these unnamed varieties, and they are mentioned only to remind our readers that "still there's more to follow." We wish to notice, however, that Mr. MOORE has obtained a fruit of high quality through such unexceptional parentage as Delaware and Iona, and this corresponds with Mr. CAYWOOD'S efforts in the same way, for his Poughkeepsie Red is derived from Delaware and Iona. Still another variety, with the same parentage, has been brought to our notice, that originated in this city a few years since, and has fruited several times. It is called the Genesee; it is of the highest quality, very early, and quite promising. Another season we hope to say more about it.

CLEMATIS HENRYI.

This large-flowering variety is a remarkably fine white one, the color being very pure. It is a strong-growing plant with handsome and profuse foliage. The flowers are plentiful, though not so numerous as on the blue-flowered Jackmanni, but they are larger, frequently measuring seven inches across. The divisions of the flower are usually eight in number, overlapping, and of a pure, satiny white. The plant has been subjected to the severest tests of climate, and will stand anywhere in this country with proper protection. The stems should be taken down in the fall and coiled up over the roots of the plant, and be given a covering of leaves. Remove the covering early in spring, and prune back the stems within three or four feet of the ground, or lower, if the wood should be unsound. To give fine blooms the plants should have a rich soil and a plentiful supply of water during the blooming season. A yearly dressing in the fall with good stable manure of the soil occupied by the roots will ensure the continued production of large flowers. From the appearance of C. Jackmanni, as often noticed, this supply of needed food is apparently often omitted.



IMPATIENS SULTANI.

IMPATIENS SULTANI.

During the past few months we have, at different times, laid before our readers notices of a plant new in cultivation, closely related to the common Balsam; we refer to *Impatiens Sultani*. This plant we have had in our collection for several months, and like it more the better we are acquainted with it. It is, without question, destined to become very popular. The engraving of it, which we here present, has been made from a plant that has received no attention in the way of training, and exhibits its natural form. The wonderfully compact and symmetrical development that the common Balsam is capable of, and which it assumes

when properly raised, and subjected to frequent shiftings during its early growth, may, undoubtedly, be similarly displayed by the present subject by means of the same treatment. However, it is a beautiful plant even without special care. It grows about a foot or fifteen inches high, and the stem and branches are a very light green and translucent, resembling the Balsam; the leaves, which are two and a half to three inches in length, are ovate, acuminate, tapering to the petiole, which is about half the length of the blade, serrate, the teeth ending in sharp, fleshy points. The terminal nodes of the branches are very short, hence the leaves at their extremities are numerous, almost whorl-like, and from the axil of each



IMPATIENS SULTANI, LEAF AND FLOWER—NATURAL SIZE.

arises a peduncle from an inch and a half to two inches in length, usually dividing into two or three pedicels bearing the blossoms. The flower is about an inch and a half in diameter, and at front view appears much like the blossom of a single Geranium. Closer examination reveals a calyx of four sepals, two of which are similar in form and size, minute, green, opposite to each other, standing horizontally and at right angles to the other two; these latter are vertical and opposite, the lower one white and much smaller than divisions of the corolla, and having a long slender spur; the upper one is considerably larger than these divisions and colored like them, except that on the back of it is a white marking exactly the shape and size of the opposite or lower sepal. At a front view of the flower the upper sepal appears as one of the petals. The petals at first sight appear to be four in number, but really they are but two, each one deeply divided into two lobes. Altogether the peculiar construction of the flower is exceedingly interesting.

The flower has almost a flat surface, nearly circular in outline, and is of a rosy crimson color. The plant is almost continually in bloom. How well this plant will do in the open air we have, until lately, to assist in forming an opinion, only the fact that it thrives in that manner in France; but a writer in the last number of the *Gardener's Monthly*, residing in Melrose, Massachusetts, gives an experience with it, this summer, in the following words:

"*Impatiens Sultana* is a plant upon which I have had two very decided opin-

ions within as many months. I had, during the early part of the season, my tomahawk all whetted and ready for its scalp. Now, said tomahawk is wrapped in several thicknesses of apologies and laid away. *Impatiens Sultana* has earned a right to live. I had my plant through the mail about the twentieth of May. It was perhaps five inches high, and from a two-inch pot. It grew rapidly from the first, but the sun scorched its leaves, its few flowers were hidden under the foliage, and it made no show at all. This up to about the middle of July, since when it has grown in beauty most marvellously. It is, at this date, about two feet high and considerably more in diameter, with a dozen large branches from the bottom an inch and a half in diameter, with scores of side branches from each, and every shoot crowned with its bright carmine blossoms. I think there are at least one hundred flowers on it all the time, often twice that."

The leaves of the common Balsam would burn when exposed from the sun if turned out directly from a warm greenhouse, and we know better than to treat it in this manner. If the young plants are properly handled and hardened off before setting out, there will be no burning of the leaves, even from the first. The plants are easily raised from cuttings, and for the most part will probably be so propagated, for the reason that seeds of it are scarce and dear. It grows well from seeds, and it will be most convenient for some to raise them in this way; perhaps a demand for the seeds may cause a good supply of them.



GRAPE-VINES—PRIZE ESSAY.

Planting and management of Grape-vines in the family garden.

For the Eastern, Middle, or Western States success in Grape culture, either in the field or garden, will depend upon the following points: 1st, Soil and location; 2d, Preparation of the ground and planting; 3d, Pruning and training; 4th, Winter protection; 5th, Varieties.

1st. Soil and location. As it regards chemical composition, the Grape succeeds on a wide range. Thin, rocky slate, deep porous gravel, hard tenacious clay, all, though not equally well, bear fairly good crops. The gravel usually excels in quantity, the slate and clay in quality. In one respect the vine is exacting. The soil must be dry and well drained. The location should be sunny, warm and airy. Localities having a breeze from off bodies of water are good. Warm hillsides, when terraced, are admirable. If near buildings, choose the south or east sides, but do not train on to a building, but to a trellis a few feet off, as there is a better circulation of air.

2d. Preparation of the ground and planting. Most garden soils are rich enough for vines. Plant in the spring, and plant deep. Make a broad open place, not less than fifteen inches deep, and in porous soils go down from twenty to twenty-two inches. Cover the roots with surface soil, not letting any fresh manure come in contact, and do not, at first, fill the hole made for the vine over half full. Select vines graded as first-class one year, or first class two years, and, if possible, choose only those having many fibrous roots. Before planting cut back the roots to twelve or fifteen inches, and the top to six inches. After six or eight inches of soil has been put on the roots, a covering of unrotted ma-

nure will serve as a mulch and later as a fertilizer. Broken bones are excellent put near the roots in planting, and after the vine is old enough to bear pour around the roots the soap suds from the kitchen. Avoid an excess of animal manures, using ashes, leached and unleached, bone dust or mineral fertilizers.

3d. Pruning and training. To attempt to grow Grapes, even in the garden, without learning enough of the habit of the vine to give some form of pruning, is simply folly. If in the most favored regions, on the most natural Grape soil, vines untrimmed speedily come to disease and ruin, how much more will this be true where success is less easily secured. The limits of this article will not allow a full description of methods of pruning, but I shall present a few elementary principles. The fruit of any one season comes from buds on the canes of the previous year's growth. This growth of last season is the new wood, and all former growth is known as the old wood. New wood is known by its smooth, firm bark, the bark on all old wood being scaly or loose on the outer part. Vines eight feet apart each way are pruned so as to leave not more than five nor less than two canes of new wood for bearing, each cane two and one-half to three feet long. The first two seasons are given to growing new wood only, the first crop of fruit being borne the third season, and the foregoing is applicable to the seasons following the third. Two canes are enough for the first crop of fruit. As to methods of training, we give several, taking the simplest first.

a. Stakes. Each vine requires two stakes set two feet apart, the vine midway between, the stakes five feet above ground, and two feet or more deep, so as to be perfectly firm, the canes being

firmly tacked to the stakes, crossing from one to the other.

b. Post and trellis. This method of training is to be preferred to stakes. Plant the vines eight feet apart in a perfectly straight line. When only two vines are grown, a good plan is as follows: Set a post seven feet long two and one-half feet deep; two feet from this plant a vine, four feet from the vine set another post, four feet from this another vine, and two feet from this the third post. To the posts firmly nail three slats, each sixteen feet long by four inches wide, putting one slat at the top of the posts, one eighteen inches from the ground and the third between the others. When three or more vines are planted in each row use wire, No. 9 or 10, instead of slats, firmly bracing the end posts, and if the posts are set firmly they will do if only set between each alternate vine. A very simple summer house may be made by setting posts at each angle of an octagon, each side of which is eight feet, and plant the vines midway between the posts. Vines should never be trained immediately upon the side of a dwelling house or other building, but upon a trellis standing four to six feet from it. The fruit will be much better and the vine can be far more easily managed. Vines can easily be trained to form an admirable screen, which, with proper annual pruning, will be for a life-time a thing of beauty and a source of profit.

4th. Winter protection. All tender varieties, such as Rogers' hybrids and many others, should have, after the leaves have fallen, the canes taken off the trellis and laid upon the ground, covering from one to three inches with soil. This affords a perfectly simple, safe and sure protection, and must not be omitted. Uncover in spring after the ground will do to work, and not before.

5th. Varieties. For first early, select Moore's Early and Hartford; the Tallman or Champion is of too poor quality. For second early, plant Concord, Worden, Wilder (Rogers' No. 4), Telegraph of the black sorts; Brighton, Lindley (Rogers' No. 9), and Delaware of the red Grapes; Martha, and your choice from Duchess, Pocklington, Prentiss, of the white varieties. Very nearly all these are strictly hardy Grapes, and all have an established reputation. There are

several non-enumerated later Grapes, but for the garden we advise to try first the earliest sorts. If these succeed in all seasons it is easy to add to the list.—S. S. CRISSEY, *Fredonia, N. Y.*

SPIRÆA REEVESIANA.

Reeves' Spiræa, *S. Reevesiana*, is one of the most beautiful and free-blooming of the shrubby section of Spiræas. Our engraving shows a cluster of flowers about two-thirds natural size. The plant grows about four feet high, and when in bloom in early summer it is literally covered with its snow-white blossoms. It was originally brought from China, and



SPIRÆA REEVESIANA.

there, also, was found in cultivation the double-flowered form of it, which rivals, if it does not even excel the double Plum-leaved Spiræa, *S. prunifolia* fl.-pl., in the beauty of its little double flowers. These are produced in large clusters, and in the greatest profusion, and their beauty is made more conspicuous by their setting of green leaves. Both the single and the double varieties are quite hardy, and will stand in any part of the country, and everywhere prove their rightful claim to a prominent position in the shrubbery.

All the hardy Spiræas are worthy of cultivation, and grounds of sufficient size should embrace the principal varieties. Small places that can only afford room for few can employ this one, and especially the double-flowered form, as one of the choicest. The hardy plants requiring but little care, and yet yielding their flowers abundantly, should be freely employed in all gardens.—S.

SOME GOOD PLANTS.

In ordering my flowers, last spring, I had the Chrysanthemum fever so badly that I forgot to include any Geraniums in my list. The generous florist saw my mistake, and corrected it by sending me, gratis, some six or eight young plants, which I have tended very carefully, with the following results :

First in the list I place Jas. Y. Murkland, a peach bloom center, with well defined white edge ; it is a free bloomer and strong grower. Then comes Thorpes' Henry Cannell, another fine bloomer, and of a most brilliant scarlet and very much like W. E. Gladstone in size of flower and vigor of growth. Then James Vick is both thrifty and free, and its color the clearest salmon I ever saw, so fresh, and every one wants to eat it, almost, so fruity does it look in color. Conquest is another salmon, very much like Edmund About, and both of them fine growers and bloomers. Flocon de Neige resembles Mrs. E. G. Hill, both white in opening, but changing to a charming blush in a day or two ; these are free in both growth and bloom. Lemoine's Cannell is exquisite in shade, resembling a Jacqueminot Rose, and is still darker than Hoff. Beach, though with me its growth does not seem very strong, not so strong as Hoff. Beach, a new French Geranium, of last year, and very beautiful. I have grown Gelein Lowagei for two years, and find it admirable in color, growth and blooming qualities. Mrs. Chas. Pease is a lovely pink, with clear white eye, and does well when bedded out. Wm. Cullen Bryant is a large, single red, with a white eye ; it is dwarf in growth, but free and of abundant bloom.

So much for Geraniums. Now, who will give me some experience in growing *Tabernæmontana Camassa*? I find my buds wont open well, they show the white, but refuse to open freely, though I have tried both sun and shade, warm water and cold, and manure water, also. The plant grows very rapidly and buds freely, but they all are satisfied to remain buds. I think the other variety may prove easier to manage. My *Plumbago Capensis* is now a very large bush, have had it about seven years, and it has been a mass of lavender bloom all the season. The scarlet *Justicia* is another valuable

plant, almost hardy ; it stood beside my *Plumbago* in the coldest corner of my conservatory all winter, and has been full of its long, coral-like blossoms all summer.

I seldom see the *Achimines*, *Gesnerias* and *Gloxinias* mentioned. I had over one hundred blooms from one white *Gesneria* tuber, this summer ; it is large and likes a big box to grow in better than anything else ; its long, trumpet-shaped flowers are very fragrant and spicy. These bulbs I keep in dry sand in paper bags in winter, up in a warm corner in the top of my wardrobe, where it never gets cold, even much less freezes. The *Achimines* likes shade, and does admirably in baskets on that account. My experience with *Gloxinias* is much more limited, and what I have seem to prefer shade to sun, and have bloomed freely. All these three plants belong to one family, and are preserved in winter in dry sand in a warm place.

I have been very much pleased with *Ipomœa Bona Nox*, or Evening Glory, and find it grows easily and blooms freely, My Blue *Agapanthus* gave me a stalk with over fifty perfect Lilies on it, and larger ones gave several stalks of bloom ; it is no trouble at all—it sat on the floor in the conservatory all winter, and was watered only two or three times till spring wakened it into new life.

I have a fine *Stephanotis* that never fails me in summer. This plant is not as much cultivated as it deserves ; it has long, tube-shaped, fragrant, white flowers, much like the *Gesneria*, only it is more waxy. In winter I train it against the the brick wall in the conservatory, where the chimney keeps it warm. My Wax Plant shares this "chimney corner" with it very successfully, but unlike the *Stephanotis*, it does not bloom ; it is the variegated variety, and I often think its pretty creamy and waxy pink leaves are at the expense of the coveted flowers.

A fine plant for a basket is *Russelia juncea*, with its wiry, grassy stems, and myriads of little red coral tubes ; it is not unlike the pretty *Manettia* vine in bloom, though the *Manettia* has larger and longer flowers, but both are like bits of coral.

I began this by saying I had the Chrysanthemum fever, caught it from Mr. JOHN THORPE, and hope to have a fine show of the Queen of the Autumn this

coming fall. I have three beds of the different varieties, but mostly of the Japanese incurved varieties. These plants at present seem to be exciting universal attention from flower growers. —LADY PLACIDO, *Charleston, W. Va.*

DIADEM BEGONIA.

A variety of Begonia with ornamental foliage, lately introduced into this country, has been very much admired in my collection the past season. The central fleshy stem bears large leaves, which are palmate in form, or deeply lobed, with an irregularly dentate margin; the



BEGONIA DIADEMA.

surface is smooth and shining, of a clear green color, with numerous white spots; these spots are various in size and of irregular form, and disposed in no strictly formal manner, though following, to some extent, the directions of the veins. A little depression marks the center of each spot. It is quite distinct from all other varieties of Begonia, and is very striking and attractive. Its beauty is such that it will be highly appreciated by plant lovers when they are acquainted with it, and it is a pleasure for me to inform your readers of its good qualities. The peculiar form and markings of its leaves cannot fail to produce a favorable impression. As a decorative plant it will be much used in the greenhouse and the window, and will do most satisfactory service as a table plant. Though at present this plant is scarcely known, it will not be long out of the hands of all enterprising florists.—*

MY FIRST BULB.

On taking up an old number of VICK'S MAGAZINE, I was greatly interested in a contributor's experience of the unfortunate and uninteresting manner in which she was instructed in the study of botany, and of her father's sympathy for her, which resulted in his burning the book, with all its hard names. I was not as fortunate as she when a child, for my book did not get burned up; but my distaste for the study increased as every week the older pupils went to the woods for flowers to analyze, while the younger ones, of whom I was one, were left at home.

It was thirty years after leaving my botany class before I cared to buy a plant or root a cutting. But one day I happened in at a greenhouse on an errand, and as I followed the florist about, I picked up a bulb, a little the worse for having been stepped on. On handing it to him, he said, "that's no good." "May I have it?" I asked. "Certainly, you may, but you might as well throw it away." I did not know why I wanted to keep it, nor could I have imagined it would awaken in me an interest that had lain dormant since my childhood. I potted my bulb, and put it on a broad window-seat in my dining-room. Presently a circle of leaves came up, then a center stalk with its promise of flowers; but before they were at all developed a cat jumped in at the open window and broke off the flower stem. As spring opened, the next year, I longed for a garden, and hired a man to prepare one for me, which he did after many mistakes. Then a florist filled it according to his own judgment, with plants whose names were mostly unfamiliar to me, and after putting into one of the beds my only bulb, I was ready for my new occupation. My first attempt to keep down the tiny weeds was made with a common field rake. With all my care, I handled the clumsy tool so awkwardly that in a moment the new flower stalk of my bulb was broken in two. I did not waste time in useless regrets, but finding it not quite broken off, I secured it in an upright position with thread and a thin bit of whalebone, hoping it would grow together. As I watched it, day by day, the top swelled more and more, but never flowered. One day, noticing two root-like excrescences on the under side of this

odd formation, I cut it from the broken stem and buried it beside its "better half." A plant just like the former one soon rewarded my care, but to this day I do not know the name of the bulbs, for the next winter, being obliged to leave my home in the care of a hired man, I lost nearly all my plants, and among them these bulbs. I learned afterwards that my experience, although rare, was not a solitary one, as I had supposed it to be.

My one regret about gardening work for myself is, that aside from its providing *boutonnières* for my many boys and a house full of flowers for my one girl, the time devoted to my plants seems mispent. So much attention as is required in their culture ought to give better returns. For years I have been dreaming of a floral training school for poor girls, where they may acquire the knowledge and skill necessary to raise plants successfully. If my dream is ever realized, I shall know that my gardening time has not been wasted, and that the life-germ of my floral school was in my little disappointing bulb.—LEON.

IN AUTUMN.

I climb the hillside slope, this autumn day,
As one who leaves the lower world behind,
And seeks to enter heaven some other way
Than that most mortals find.

How still the scene! No wind's low voice is heard
Among the trees that scatter jewels here;
I miss the hum of bee, the song of bird,
The flowers that were so dear.

Here, peace dwells on these haze-encircled heights;
A peace so sweet the heart forgets its care,
Its yearnings for the summer's lost delights,
And nature seems at prayer.

This spot of earth seems like enchanted ground,
The border-land of heaven; who shall say
The circling hills are set to mark its bound
Which is not far away.

I seat myself upon a mossy stone
And dream I am a king who sits in state;
Had ever monarch yet a fairer throne,
A grander palace gate?

What gorgeous canopies are overhead;
What curtains fall about me, fold on fold,
Of crimson, russet, sombre green and red,
With broideries of gold.

I choose my scepter from this bank of Fern,
My crown I fashion from this russet vine,
In cups of Moss sweet incenses I burn;
What realm compares with mine?

What if I have no vassals at my call,
No train of courtiers lingering at my side?
I have my thoughts, and they are more, than all;
The king is satisfied.

—EBEN E. REXFORD.

IRRIGATION.

Is irrigation, for gardens and small-fruit crops, of any particular value east of the Mississippi?

If by irrigation we understand the possession of facilities for wetting the soil through on the occurrence of any severely dry spell in the growing season, and especially when fruit is about swelling to its full proportions, the answer to the above question is most assuredly affirmative. The need for such an aid may occur but once in a year, and in some years not at all, but when it does occur a water supply at hand is the capital and decisive question, the turn of the balance between a full crop and full profit on the one hand, and the loss of all, of time, toil, seed, soil value, plants, produce and profit on the other.

It is of no small advantage to have ready, whenever wanted, enough water for merely sprinkling wilting leaves, or drenching infesting insects, or wetting the surface to promote manurial decomposition; but what is usually meant by irrigation is such a wetting of the whole soil through which the roots extend, as to diffuse among them the nutriment from the surface rendered soluble there, by the ferment induced by heat and moisture, which converts insoluble elements of plant food into a solution which they can take up, but which, however, excess of water may float away out of their reach.

We have here a garden sloping to the southeast, with a rill of water running down the roadside gutter, from which we can draw, when needed, by pulling out the plug of a pipe laid ready to lead the water in. Last year, 1883, we had no occasion to use it, for we had no serious drought here, in Central Pennsylvania. Growth was free, and we were embarrassed with rains through hay-making and harvest, and the cool, cloudy weather that prevailed later was a serious drawback to the proper ripening of Corn, Grapes and late Peaches. But in the year before our water supply came into requisition twice, doing excellent service in swelling out to full, handsome proportions the later ripening Strawberries, which on neighbors' lands, out of reach of water, were few, small, dry and unprofitable. Again in September, the loaded Grape-vines and Miner Plums and Tomatoes were fainting

and threatening to shrivel. Water was again turned on for twelve or fifteen hours, enough to soak the ground, and all these fruits developed under the bright sun with a perfection of size and quality seldom reached. Having some good alluvial soil liable to occasional overflow, we have adapted it to Strawberry-growing with almost assurance of full crops, granting clean culture, by digging ditches and throwing the soil out to raise the surface above high water level. If a drought occurs likely to prevent the full development of the fruit, we have but to run these ditches full of water to make all safe.

Market gardening can scarcely be made fully successful anywhere without command of water. The crisp and tender Radishes, and other vegetables of the Paris markets largely owe their quick, tender and sure growth to abundant and judicious watering. Even in humid, grassy green England the first question with a newly starting nurseryman or gardener, now is, after that of soil, about means of drawing or storing up full supply of water to meet any default of it in the growing season.

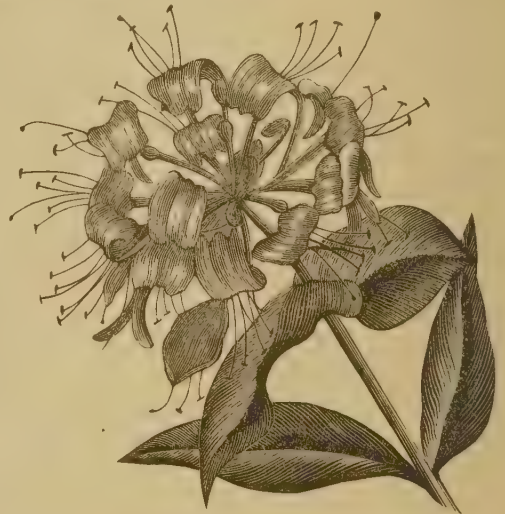
It is said that the moon is dried up to a cinder-like condition, full of cracks and fissures, into the depths of which the waters of that orb appear to have sunk. And the large areas of dry-as-dust surface upon our earth, desert for want of water, and their extension in the oldest countries since the records of history began, give us the gloomy prospect of a continually drier and drier condition of our planet, and of a time coming, in the far but sure future, when it will also be wholly barren. We are far from that dread fate now, but it should be our policy to acquire and use, with prescient care, all the means within our reach of attaining for each of our gardens as well as our houses, an adequate supply of water, ready for the exigency that may fall upon us. It has been observed by many that a very dry season so starves many sorts of trees and vines as to greatly affect the next year's growth.

I have cited only examples of the value of a water supply in saving Strawberry and Grape crops among small fruits, although Mr. WADDINGTON does not include the Grape in the list of small fruits mentioned in his excellent prize essay,

page 5, yet I think it should count as one of them. Raspberries, Currants, &c., are even more liable to injury by drouth occurring at their season of fruiting, because of the shallow, superficial running of their roots, which as Mr. H. says, cannot endure the spade, and which cannot always be kept moist enough by a mulch. —W.

THE DUTCH HONEYSUCKLE.

So much attention has been given, the past few years, to the white Japan Honeysuckle that an old and worthy favorite, the Monthly Fragrant, or Dutch Honeysuckle, has been comparatively neglected. We cannot afford to lose sight of so valuable a plant.



MONTHLY FRAGRANT, OR DUTCH HONEYSUCKLE.

The Monthly Fragrant Honeysuckle is a variety of the common Woodbine of Europe, *Caprifolium periclymenum*, which grows wild there and in Great Britain, in the groves, hedges and thickets. There are several varieties of this species, and one of the best of them is the late-flowering kind, shown by the present engraving in reduced size. The flowers, in dense clusters of twenty or more, are produced at the extremities of the new shoots as they are formed, from July until late in the fall. The blossoms commence to open at the base of the cluster, or whorl, and follow in succession around to the center or terminal flower. The limb of the corolla consists of two principal parts, the upper one being broad and four-lobed, while the lower one is narrow and strap-shaped. The inner surface is white suffused with light rose, and the outside

a purplish rose. As the flowers become older the whitish inner surface changes to a clear buff. The flowers are deliciously fragrant, having no superior in this respect. The flower clusters are succeeded by compact clusters of bright red berries as large as Currants. This plant is of the easiest culture and quite hardy. It is a strong grower and will cover a pillar or trellis twelve or fifteen feet in height. Those who admire the Honey-suckle should not overlook this variety. —W. C.

LEMON VERBENA.

The citron-scented plants are among the most favored and grateful to mankind, whether the Lemon Balm found in old gardens or astray by the wayside, and beloved by all the bees, Lemon Thyme choicest of borderings, Cedronella or Citronella, pleasing even in barbers' essences, the Molucca Balm or Shell Flower, Lemon Geranium, and perhaps a dozen rarer things of kindred fragrance. The Lemon principle wherever found is the purest nervous stimulant, acting on the whole system through the sense of smell, as well as in refreshing waters and teas. Spanish, French, Provençal and Mexican women depend on their Lemon teas as our fair English neighbors on the Chinese herb, which in novels they are represented as perpetually sipping, and really drink about five times a day. Is Dolores or Rosita upset by a neighborly affront, the ill behavior of her children, or the breaking of a string of beads, a burst of language instead of a burst of tears works up her feelings, and she flies for relief to the garden for a handful of her favorite Lemon plant, steeps a pitcherful, and solaces herself at intervals the rest of the day sipping it cold. It lays a hand of calm on her grieving nerves, and she feels made anew. In passing the Lemon Verbena and catching its blissful scent, I feel as if a whiff of some life-giving elixir had been granted that would renew one, if he could only catch enough of it. One wishes American women, poor, nervous, unstrung creatures, would get used to taking Lemon tea, Lavender water, Hungary water, or other of those pleasing cordials of flowers whose benefits our ancestors knew so well. Nerves are best treated by perfumes, which affect

them as alcohol enters the blood. I have cured an oppressive headache, an imaginary ailment, by the scent of a fresh damask Rose, have alleviated the nameless writhing torture of spinal ailment with cool garden perfumes, and seen racking neuralgia relieved by the odor of sweet flowers. Why not? We know that faintness, vertigo and nausea, symptoms of extremity, can be driven off by Lavender, Citron and Camphor scents, and sensitive persons have died of passing through vile odors; why should not these things be owned as agents of no common strength, and used for all they are worth? Sweet odors quiet nerves. Nothing known to American gardens is more a fountain of pure scent than the Lemon Verbena.

You may fancy that I have a partiality for it, and guess right. Dozens of the plants flourish in my garden, and I would like to see a bush in every woman's flower border. Besides the refreshing scent, which is reviving as a whiff of camphor or ammonia, a leaf put in the teapot with the Chinese herb gives a fine flavor to common grades of tea. A growing plant of this Verbena, or of Lavender, purifies the air in a sitting or sick-room by chemical process, neutralizing bad air as really as carbolic acid or copperas by far pleasanter means. In old times strong herbs and their odors were the only disinfectants known, and were held proof even against the plague itself. Windows full of sweet smelling plants keep out flies, and the Lemon Verbena so fills the air about it with its vapory scent as to be specially useful in this way.

The seed is troublesome to start, being fine as *Portulaca* and more sensitive. To be sure of its germination it is best, like all other fine herbs, sown in the fall, or as soon as ripe, in very fine, moist sand, with one-third or less wood-mold sifted through, and a wet flannel or felt laid over the surface, with no other covering to the seed. Or, sow it with the thinned sifting of wood-mold, and cover the box with oiled paper tacked tightly over it, giving air every few days till the plants come up. Moisten by setting the box in water. By far the best way to supply the garden is to get a plant or two, which costs no more than a packet of seed, and when it is well grown take cuttings from it, which start readily in sandy

mold when covered with glass or paper. They may be rooted from June to September out of doors, or any time in a warm room. Take tender shoots, three inches long, not woody ones, for cuttings.

I find Lemon Verbena grows rapidly in a rich, light soil of garden loam, old sifted manure and sand. Dig out a basin fifteen inches across and as deep, in the border, put in five inches of old leaves and manure with sand over. Set the plant deep, pour a quart of water round it, and sift the prepared soil into the water without pressing. As it settles it will pack the roots just right. Turn a peach basket or light cover over the plant, and shade till it throws out new shoots. It is rather a delicate thing in some respects, not liking hot sun while it is young, and shrinking at the first touch of frost. On this account it is convenient to grow a few plants in tile pans or boxes eight inches deep, that can be moved as desirable. In the strong sandy soil it loves, with good drainage, it is hardly possible to give the plant too much water from the watering pot. Three times a day in hot, dry weather I have watered my plants, and they thrive gratefully. As it is grown for leaves, not for its pale violet flowers, it is best to clip these as soon as they appear. Nipping the buds only makes them start twice as many blossoms later, so let them flower, and cut the bloom at once, before the plant loses force in the fertilizing process. Then give some guano water, or lawn dressing, to have it make fresh sprays. The sprigs may be cut for drying at this time, if wanted, and are fragrant to the very stems as long as they last. But it is best to keep the Lemon Verbena as a window plant to perfume the room through winter; the greatest care it needs being to guard from frost and sudden changes of temperature. A plant lives twenty years if not frosted, and grows into a lovely shrub many feet high, its willowy, pale-green foliage having much the grace of the California Pepper tree or Australian Acacia. Lemon Verbena in Pacific gardens grows in a season or two to the size of a large Castor Oil plant, the rich volcanic sand and even temperature suiting its refined senses to a charm. A well grown plant is a fine ornament in sitting-room or conservatory, especially contrasted with the dark

leaves of a Myrtle or Camellia.—SUSAN POWER.

COAL-OIL HEATING.

I hope the subject of using coal-oil lamps for heating small greenhouses, which was so well opened on pages 179 and 180, will be fully discussed. I have used coal-oil lamps, first, for keeping frost from a cellar full of half-hardy plants during severe, continued cold spells, and then for similar use in a small greenhouse, without any pipe to convey the fumes out of the house, but using ordinary lamp chimnies to secure perfect combustion. No smoke was apparent, nor any injury to the plants. As a measure of, perhaps, needless precaution, I set the lamps in pans of sand or dry ashes on the floor, and, after a neighbor once came rushing to my door, late at night, thinking from the illumination of so much glass that there must be a fire raging, I dropped a cylinder of wide pipe over each lamp to obscure the light. The great advantages of such aids in severe weather are the certainty of their steady operation all night at any degree to which the wicks may be turned, up or down. Towards spring I have used lamps under small propagating beds for supplying bottom heat, using a shallow, wide, tin tank between the lamp and the soil, with a pipe for filling and a short pipe with gum tube slipped over it for emptying, and for testing how much water is in the tank. This is done by lowering the end of the piece of tubing till water begins to run from it. I had no tube to carry off the lamp fumes. Some people allow a lamp to burn all night in their sleeping rooms without noticing any ill effect. My experience has been too brief and too limited to ground a decided opinion upon it.—W.

THE AMBER QUEEN GRAPE.—The Amber Queen has proved very satisfactory with me this season. My vines are four years old, and gave a good crop, ripening about the 20th of September. The clusters are of good size and compact; the berries medium to large size, reddish, becoming almost purple when fully ripe, juicy, high flavored, excellent. The vines were not troubled with mildew, though standing beside the August Giant, which was badly affected.—G., Rochester, N. Y.



FOREIGN NOTES.

TASTE IN FLOWER GARDENING.

Nothing can be said against bedding plants themselves. A yellow *Calceolaria*, a scarlet *Pelargonium*, and blue *Lobelia* are flowers which no one can be offended with; but if we mass the three flowers, or make lines of them in juxtaposition, then the result is often unsatisfactory. No matter how rules may be laid down as to the treatment of primary, secondary and tertiary colors, it will only be the few who will be found capable of making satisfying effects out of their material. It would be just as unreasonable to expect a signboard painter to develop the picture of a high-class artist out of his material, as untrained gardeners to make the same effect as those who have trained themselves in their younger days in studying effects of arrangement, capability of flowers, and the peculiarities of coloring.

I am not going to lay down any code of rules for guidance in these matters, for the simple reason that rules are useless. Had we a strictly defined enclosure with the same surroundings in every case to make beautiful with a living picture, it would even then be difficult to lay down any rule; but, when the framing to every such picture varies—nay, to be more correct, when what we have to do is not so much to make a picture ourselves as to add one small feature to a grand, ever-changing picture already formed, rules are impossible. In one garden it would not only be admissible, but simply the only way to make effect to employ masses of primary colors very largely—blocks of yellow, or of crimson—while in another a very little yellow might be detestable. We may descend to the use of a particular bed, and where one man would make it a bright, effective spot with common materials another would

make it an eyesore. Nothing is commoner than crimson bedding *Pelargonium*, purple *Viola*-Pansies, and “Golden Feather.” Mass the *Pelargonium* as a central block, band that with the *Viola* a widish band, and a very narrow line of the *Golden Feather* will not be out of place as an edging. There will be nothing vulgar about it, but, on the other hand, a simple and effective bed. Too little purple or too much yellow, however, would completely alter appearances. Yellow masses are best relieved with pink, or preferably blue of a lilacy shade. Blue, again, is never so effectively managed as with white or blue of a lighter shade. Blue is always best treated, not by way of contrast, but in harmony with other cool soft shades. A mass of blue, if too cold and depressing, is wonderfully brightened by the addition of a few white-leaved *Pelargoniums* with scarlet flowers dotted about the bed. As a rule, I think far too little blue is used in gardens. Properly treated, it can be made the base of most restful effect; a very little crimson and less of yellow is only necessary to give the required brightness. White is also a most important feature too often overlooked. In isolated beds almost anything can be planted so long as the honest principles of good taste are not violated; but here, as in other things, careful taste will show itself at once.

Another matter in connection with flower gardening is that of the change of flowers from year to year. *Verbenas* are hardly ever seen now, *Calceolarias* are scarce, and many other flowers well worthy attention are never seen in many gardens. Now what seems to me the best way of imparting interest to flower gardening is to break away from some of the novelties which have taken the place

of those discarded plants and grow these once again. Man likes change—novelty—but he is also much attached to old flowers. Let us try something of this. In most gardens we can manage to keep the stock of plants in abeyance for a season while some old acquaintances have an innings, and most likely will make a good score.—SYLVANUS, in *Journal of Horticulture*.

FUCHSIAS AT TROWBRIDGE.

Persons who have attended this show for years past, say that the Fuchsias were never before finer than the specimens seen on this occasion. Mr. J. LYE, of Clyffe Hall, Market Lavington, was again first in the classes for six and four varieties, staging plants averaging nine feet in height, and from four to five feet through at the base. The varieties shown were mainly those of Mr. LYE's own raising, and they were characterized by that bold growth and amazing floriferousness seen in the Clyffe Hall strain. It might be objected that the method of training adopted by Mr. LYE is too formal, the flowering branches being tied down to the framework of the plants a little too tightly, but this is to a great extent a matter of necessity. The plants have to be conveyed by road for a considerable distance, and it is necessary to tie the branches in to keep them from whipping each other. But there is no framework of stakes, one stout central stake is all that is required. But formal as the plants are deemed to be by some, they are not without a good deal of elegance; the foliage is perfect, forming a kind of inner garment overlaid with the rich jewelry of hundreds of finely developed blossoms. When the plants are staged it can scarcely be conceived they have traveled so far, as but few flowers are injured on the journey. "What a great extent of glass accommodation must be required to grow these plants!" said a visitor to the show in my hearing; but the very reverse is the fact. It is true the plants, which are pruned into shape about November, are kept in a greenhouse all the winter, and break into growth then, as well as make some headway; but the fact is, all the finishing off is done in the open air. Early in the summer the plants are stood out of doors, each pot being placed on a piece of board, and a rough canvass awning is

spread over the plants. Here they are carefully tended, well looked after in the matter of watering, and fed occasionally with liquid manure, and it is these attentions that lead up to the development of such splendid specimens. Fuchsias are also very finely shown in this district by nurserymen also; and the plants staged by cottagers, and in not a few instances grown under difficulties, are far in advance of what may be seen at many provincial shows.—R. D., in *Gardeners' Chronicle*.

BERBERIS DARWINII.

A writer in *Forestry* says, "This most beautiful Berberry is, I think, the 'Queen of the family,' its beautiful flowers of the most rich amber color, turning to orange as it advances in flower. I think it should be in every shrubbery, even of the smallest pretensions; it makes one of the most beautiful specimen shrubs known, in this case it should be sparingly pruned. As a hedge plant it is also very good, stands clipping well; some think it most adapted for farm hedges; this I do not quite agree with, as it will not stand the rough usage of the common White Thorn, when once broken down by cattle; but if an ornamental hedge is required in pleasure grounds, few plants will give more satisfaction. It can be kept quite dwarf by clipping twice during the season. It is a native of South Chili, was introduced by Professor DARWIN in 1849, and has become a general favorite. It is easily propagated by seeds sown in the months of August or September."

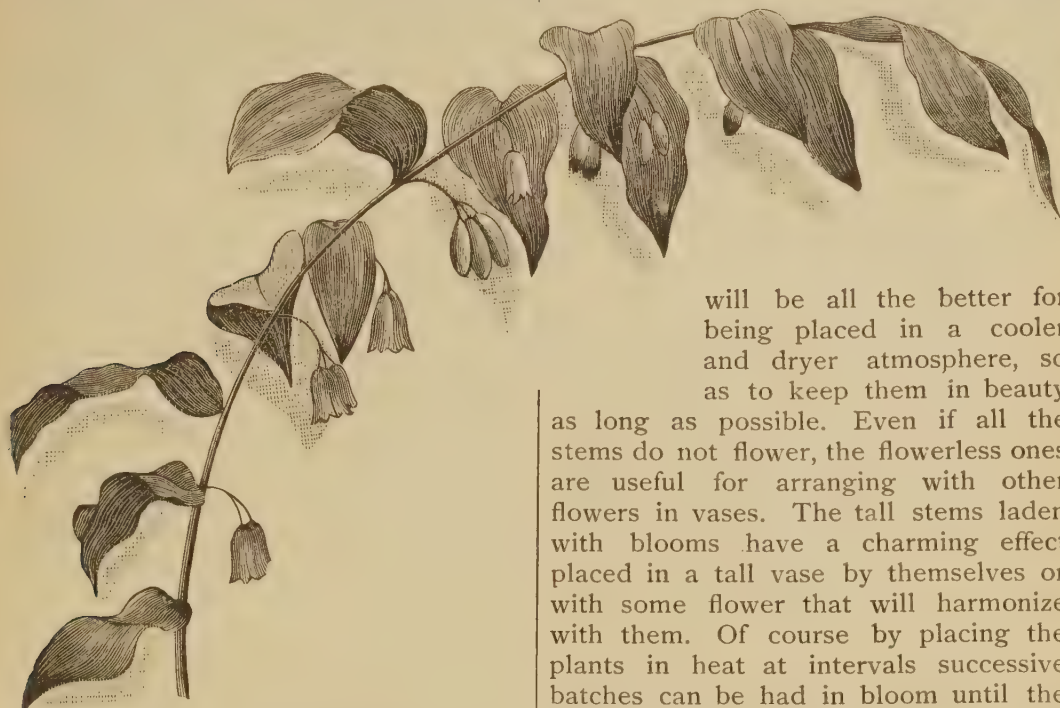
GOLD-BANDED LILY.

At the Cottage, Sandgate, the residence of J. J. LONSDALE, Esq., we recently saw an example of *Lilium auratum* worth recording. This grand specimen, growing in a pot two feet in diameter, had twenty-five stems, many measuring eight feet from the pot's edge, and carrying two hundred and ten fine expanded flowers. It has a local reputation. Mr. LILLY, (happy name,) the gardener, informed us that seventeen years ago a single bulb was potted, and each year or two since has been shifted into a pot a trifle larger, but the soil has never been shaken out, nor the bulbs disturbed—a hint to be followed by all who would be successful with the golden-rayed Lily of Japan.—*Journal of Horticulture*.

FORCING SOLOMON'S SEAL.

The Solomon's Seal is highly prized in England, while our gardens seldom find a place for it. The beauty and grace of this plant is such that we should be gainers if we could be animated by the

will be the result. In October, say, the plants may be plunged in bottom-heat, ranging in temperature from 55° to 60°. The plants will soon think it is May time, and will rapidly push up their stems, and when in full leaf and flower the plants



A SPRAY OF SOLOMON'S SEAL.

foreign enthusiasm for it. A recent article in *The Garden*, says:

"There is no need to speak here of the Solomon's Seal in the open air. Everybody knows it, and almost every garden possesses at least a tuft of it, but there is ample need of saying a good word for it as a plant to be forced into bloom early. Those who wish to have flowering potfuls of it in the dead of midwinter must now see about lifting and potting some plants of it, as the foliage has died away and the plant is comparatively inactive. Choose a strong tuft for lifting, and divide it so as parts of it will fit comfortably in a six-inch or eight-inch pot, giving preference to those pieces of the creeping rootstalk that are furnished with plump terminal buds, for it is from these that the stems will rise. After potting, the pots may be treated in much the same way as Dutch bulbs usually are, that is plunged in ashes to the rims until they are taken to warmer quarters. But being a hardy plant, the forcing must be gradual, and at no time must the heat be too great, otherwise long spindly shoots

will be all the better for being placed in a cooler and dryer atmosphere, so as to keep them in beauty as long as possible. Even if all the stems do not flower, the flowerless ones are useful for arranging with other flowers in vases. The tall stems laden with blooms have a charming effect placed in a tall vase by themselves or with some flower that will harmonize with them. Of course by placing the plants in heat at intervals successive batches can be had in bloom until the outdoor plants come in bloom. The forced plants may be planted out in the shrubbery and fresh roots taken up for forcing the following autumn. The common Solomon's Seal, *Polygonatum multiflorum*, is the kind usually forced, but any of the others of a similar stamp force equally well. Forced plants of the giant Solomon's Seal, *P. giganteum*, with stems from six feet to nine feet high, would be a fine object in a conservatory in winter and early spring."

MIRABILIS—TRITOMA.

What a delightful evening plant is the Marvel of Peru grown as Mr. MAJOR grows it at Croydon. He has huge bushes of it in tubs, in some instances having two or three plants in a tub, so as to have a variety of color. These bushes produce hundreds of flowers, rich and variable in color. In the daytime the flowers are closed, and there is little more than a mass of green, but towards evening they expand and fill the air with fragrance, rendering the garden delightful when it can be enjoyed in the cool of the evening. The perfume is more pow-

erful than that of the Night-scented Stock, or *Nicotiana affinis*, both of which are grown for the same purpose. The Marvel of Peru bushes are stood on the terrace and along the sides of the walks; the tubers of the plants, which are very large, being preserved from year to year. Any number of plants can be raised from seeds, and will render a garden sweet during the evenings of summer and autumn.

In the same garden brightness is imparted by growing the Red-hot Poker plant, *Tritoma uvaria*, in pots. They are in ten-inch pots, and the "pokers" are among the finest we have seen, the stout stems being seven or eight feet high, and the orange-scarlet flower heads nearly a foot long. Arranged with other plants on the terrace they have a telling effect and continue attractive for weeks. Good soil, very copious supplies of water with liquid manure frequently, are requisites to support such fine spikes of dazzling flowers.—*Journal of Horticulture*.

ROSES RENEWING THEMSELVES.

It may be useful at this season of the year to direct attention to the way in which all Roses renew themselves. This trait in their character is perhaps more noticeable in climbing or large bush plants than in others, but the same thing happens in the case of those grown as dwarfs and to a limited extent in that of standard forms. I allude to their throwing up (sometimes annually) strong, vigorous shoots from near the crown of the plant. I have often been surprised to see the way in which these latent buds start into life from old, hard wood; the same thing, moreover, happens so frequently that we may take it for granted that nature intends the cultivator to utilize these growths by allowing them to take the place of branches that have become exhausted. If that was not so, surely they would not appear where they do. Allow me, therefore, to impress upon the inexperienced the necessity of preserving these shoots by allowing them to remain upon the plant, and at the annual pruning to cut away sufficient of the old wood to make room for them. As an example I may mention Gloire de Dijon as a Rose that almost annually sends up one or two of these strong shoots, and it will be found that if preserved they produce much larger flowers and more numerous

than does the old wood. Dwarf bushes also renew themselves in the same way.—J. C. C., in *The Garden*.

A GREAT BOTANIST GONE.

The English horticultural journals of September contain notices of the decease of one of the greatest of botanists, and a life-long friend of horticulture, Mr. GEO. BENTHAM. We announced, last year, the completion of the great botanical work, the *Genera Plantarum*, on which Mr. BENTHAM and Sir JOSEPH HOOKER had been engaged for twenty-five years. This is the most elaborate and complete work on systematic botany ever published, and will stand in the future as the highest authority on the subject, and as a magnificent monument to the immense labor and unflagging zeal of its authors, and especially of Mr. BENTHAM, who performed the greater share of the work.

GEORGE BENTHAM, the son of General Sir SAMUEL BENTHAM, was born September 22d, 1800, at Plymouth, England. He was a nephew of the famous jurist, JEREMY BENTHAM. While a boy he developed a taste for botanical pursuits. Later he qualified himself for the practice of law, but his earlier tastes and habits prevailed. BENTHAM was the author of numerous valuable botanical works besides the one we have mentioned, and he has been the friend and associate of the HOOKERS, WALLACE, LINDLEY, ASA GRAY and all the principal botanists of Europe. He died September 10th, in his 84th year.

CHLOROPHYLL.

Dr. HANSEN, assistant to Prof. SACHS, considers that Chlorophyll consists of two coloring matters, a green and a yellow, the relative proportions being one hundred of the former to one of the latter. They are not combined, but exist side by side in the plant. Both have been obtained in the crystalline state, the green forming spheroidal crystals, and the yellow crystalizing in needles. This has been effected by removing the fatty matters accompanying them by saponification, and separating the chlorophyll yellow by petroleum spirit, in which it is soluble, while the chlorophyll green is not. The solution of the latter shows a red florescence, but that of the yellow shows none.—*Gardeners' Chronicle*.



PLEASANT GOSSIP.

ROSES—GLADIOLUS.

I have a row of Jacqueminot Roses, two years old. They bloomed profusely through June, for small plants, and considerable through the summer. They are planted a foot apart, and have made quite a growth this fall. Some stand three or four feet tall, but look spindling. When is the best time to trim them, and how should they be pruned to form somewhat a hedge-like appearance, and yet not to impair their blooming? I would be very glad to know just how to prune Roses in order to have them do their best. Would it be well to manure them this fall or next spring?

I accidentally, last autumn, left in the ground four bulbs of Gladiolus, of the variety called Shakespeare and Eugene Scribe. They all came up this summer, and bore long spikes of flowers, almost, if not quite, as fine as last year. They were planted in a bed of Tea Roses, which was protected with evergreen branches, and also thoroughly covered with snow through the last long and severe winter. Would it be safe to risk fine varieties, if pains were taken to protect them? An answer in the MAGAZINE to these questions would oblige—SUBSCRIBER, *Lockport, N. Y.*

The Roses cannot be better managed than to have a coat of good manure spread over the soil where they stand this fall, and in spring be forked in. It will be safer to leave the pruning until spring, and then before the buds start shorten the shoots to five or six inches. If any of the canes are quite strong they can be left longer, one on each side of a plant, and be bent downwards in the direction of the next plant in the row; in this way canes from adjoining plants can be bent toward each other until they meet, and then be tied together, cutting away their extremities beyond the point of fastening; thus the hedge-like feature of the row will be complete.

The last question contains its answer. If Gladiolus can be protected from frost, as they were in the case here reported, there is no better way to keep them over winter than in the ground. The danger is that there might be little or no snow during the hardest weather, in which case frost might find its way even through very thick covering. Prudence dictates

the removal of the bulbs in the fall in this climate, and keeping them in cellars or other rooms secure from frost.

PURPLE HYDRANGEA.

I have a Hydrangea, one of the old kind. I raised it from a cutting, and have had it about seven years; the plant it was taken from had pink flowers, but the flowers of mine are purple. Half a dozen cuttings have been taken from mine, and all of them have pink flowers. I have never before seen a Hydrangea with purple flowers, please let me know if you have.

I have what is called a Seven Hour flower; can you tell me the botanical name of it?—C. A. B., *Mt. Holly Springs, Pa.*

It is not uncommon for Hydrangea Hortensia, the species here referred to, to produce flowers of a deeper or purplish tint under some conditions. Blue flowers are common with these plants growing in soils containing an excess of oxide of iron; and experiments have proved that plants with pink flowers can be made to produce blue ones by watering them with water containing iron rust, and also, with a weak solution of alum, and especially with alum and ammonia.

If any of our readers know of a plant called Seven Hour flower they will please inform our correspondent in these columns. It is a new name to us.

KEEPING VERBENAS.

We wish to know the best way to keep Verbenas for spring use.—S. C., *Council Bluffs, Iowa.*

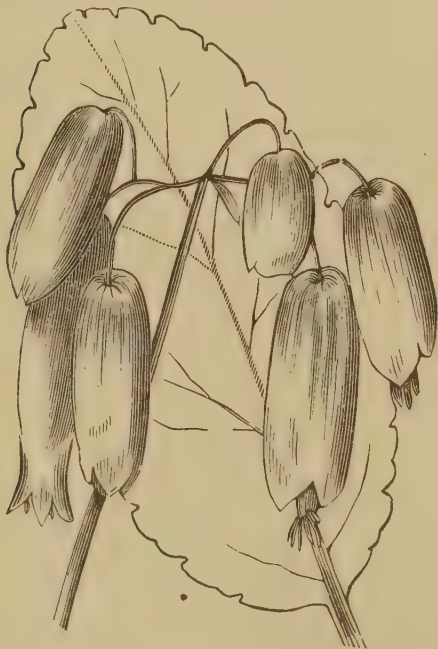
In the fall the well-rooted young plants formed by layering branches may be taken up and potted in small pots and be taken into the greenhouse. If this is done in September, or early in October, and the tops shortened in, and the plants kept a little close for a few days, they will start a new growth, and become well established plants that will carry well through the winter. This course is not advised for plants "for spring use," as our inquirer mentions, but merely for the

purpose of stock from which to procure cuttings in February or March, to propagate young plants. The young plants will prove far more valuable than the old ones, which as blooming plants are wholly unsatisfactory. Verbenas raised from seed are so much more healthy and vigorous than cutting-plants that we unreservedly advise our friends to raise them in that manner, unless they particularly desire to perpetuate certain varieties. With very few exceptions seedling plants are excellent in habit, of fine form and colors, and more fragrant than those raised from cuttings.

DAHLIA-BRYOPHYLLUM.

I have had a Lucy Fawcett Dahlia two years; the first and second season it came out in bloom it was straw and crimson striped. This season there were two buds, and I cut the root into two pieces. They both grew, and while every bloom of one was deep crimson, the other till the present time has been the same as other years, now it has on crimson and striped blooms both. Is it usual for Dahlias to do this? I have had them for several years and they never did so before.

I enclose a leaf of a plant I have had three years. It has never had any flowers, and grows readily



LEAF AND FLOWER OF BRYOPHYLLUM.

from the leaf. What is its name, and does it ever bloom? I keep it in the house and give it the same treatment as *Geraniums*; do I do right with it?—L. E. K., *Ruggles, Pa.*

It is not an unusual occurrence for a Dahlia to produce flowers different in color from that of the typical variety. This is called *sporting*. It is a phenomenon of most plants that have been long

subjected to artificial propagation and cross-breeding.

The leaf received is that of the *Bryophyllum calycinum*, and the treatment given to the plant, as mentioned, is quite proper. Its flowers are produced usually in summer, but not until the plant has acquired considerable age.

Some years since, a correspondent of a popular journal wrote as follows: "This is a singularly interesting plant, both as



YOUNG PLANTS GROWING FROM LEAF OF BRYOPHYLLUM.

regards foliage and flowers. When in bloom it presents successively two distinct aspects; first, when the calyx develops itself—membranous, inflated, smooth as silk, cylindrical, round at either end, of a pea-green color streaked with red, increasing in size until it becomes one and a half inches in length; and afterwards, when the corolla-tube, which is five-cleft and of a dull red color, breaks through and protrudes half an inch beyond the toothed limb of the calyx. In a neighboring greenhouse, a plant of *Bryophyllum* three years old, from the leaf-bud, is now producing over three hundred flowers—if I may call the inflated calyces flowers, for, as yet, few have revealed the corolla. The blooming-stalks are about three feet in height. The flowers, borne upon slight pedicels, droop directly downwards, and are swayed by every breath of air like so many suspended Chinese lanterns. In panicles, three hundred or more of these form a singular display, and one that is, perhaps, worth waiting three years for, if one is not already over-familiar with the plant. But there are other characteristics about *Bryophyllum* that render it desirable, foremost among which may be mentioned its endless powers of reproduction. Years ago I was told, when first I procured a leaf, that it was necessary to suspend it by a thread in an airy warm place, so that nothing should touch

it, and that in three weeks young plants, furnished with root, stem and leaves, would develop at the end of every nerve or between the crenatures. I followed the directions, and the promise was fulfilled; but had it been placed upon the mantel-shelf, or upon earth, the same result would have followed. Indeed, I have found plants six inches high in the garden which had, through the summer, grown from fallen leaves."

MONTHLY ROSES.

I thought I would ask you about the culture of Monthly Roses. For three winters I have tried to raise them, but they always die. Last winter I bought a large Rose bush; in December it had fourteen blossoms. As soon as it got through blossoming the plant died down, but new sprouts came out; it did that three times, and the last time it never came out again. I am having a large conservatory built, and intend to have three Monthly Roses. You will oblige me by telling me the treatment Roses require, especially Marechal Niel.—C. E. M., *Riverton, Illinois*.

You will probably succeed with the Roses in the conservatory. The atmosphere of a living-room is too dry for the plants. Set the plants in large pots or boxes, with a strong, rich soil, having plenty of old manure mixed with it; keep the temperature down to 60 or 65 degrees, syringe the foliage occasionally, and keep it clean, and water as needed.

CUTTING DOWN A CAMPSIDIUM.

I have a Campsidium about two years old, which is about twenty-five feet high; it is a plant that I am not much acquainted with. Last spring and during early summer it dropped its leaves for a distance of seventeen feet from the base upwards, which part appears as bare as a skeleton. I expect it got too much water from careless hands. If I cut it down within a foot of the base will it shoot out again?—M. J. H. C., *Los Angeles, Cal.*

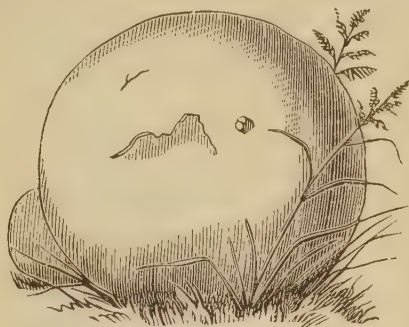
The plant can be cut down, as proposed; it will grow again, and probably make a better plant than ever.

BEEF-STEAK MUSHROOM.

I found among our lowlands, this morning, a Beef-steak Mushroom, *Lycoperdon giganteum*. In fact, I found several, but send you the largest. I hope you will enjoy eating it, as we think them very nice, indeed. They should lay in salt and water about a quarter of an hour after being cut in slices, and then be fried like Buckwheat cakes. I have talked with some persons about them, who have been in India and visited many of the famous places in Europe, and Canadians as well, and they tell me that they never heard or saw any in other place than this. Could you tell me through the MAGAZINE the regular habitat of this fungus. They are found on the banks of Canandaigua Outlet very large, indeed, and one

was found weighing over twenty pounds.—A. B. S., *Canandaigua, N. Y.*

The specimen received was ten inches in diameter, and solid, like a loaf of bread. Prepared and cooked as above



LYCOPERDON GIGANTEUM.

directed it was found to be of excellent quality. We have not the authorities at hand to ascertain the full extent of the distribution of this species, but it is probably wide. It is found in many places in the country adjacent to this city, and we believe it is not a stranger to many parts of this State. It is a native of Great Britain and various parts of Europe.

VARIOUS INQUIRIES.

H. L. C. has a plant of *Ardisia* infested with mealy-bugs. "I resorted to the remedy of coal-oil and sour milk, and succeeded in ridding the plants of them, but have to go over it daily, as they are becoming thick on it again. Is there a surer remedy?" The practice mentioned will in a short time completely free the plant of the insects.

E. L. M. wishes to know why *Dahlia* tubers sometimes will not sprout. It is because they have no eyes.

The inquiry is also made of bulbs, such as Tulips, Hyacinths, the different kinds of Lilies, Narcissus, Crocus, &c., can now be taken up and kept out of ground until spring, in order to remove them to a new location. The only way to do it would be to pot them and keep them in a cool place until ready to move.

H. D. L., writes: "I have a *Geranium*, a sport from Freak of Nature, the color of which is identical with the lightest parts of the original plant. Is not this something unusual, or have you known of white-foliaged *Geraniums* before?" This is a common occurrence. The plant will not long survive, it lacks vitality.

NATIVE ORCHIDS.

The engraving of Orchids here presented is one of the many illustrations that embellish the pages of "*The Orchids of New England*," a popular monograph, by HENRY BALDWIN," lately published by JOHN WILEY & SONS, of New York.



A GROUP OF ORCHIDS.

"The name Orchid," says the author, "is with most persons associated with the heat and luxuriant vegetation of Southern climates, and our North American species are, as a rule, known only to botanists. Few in number, terrestrial in their habit, often unobtrusive in color, almost valueless in trade, they of themselves have no claim to distinction in the vast floral tribe to which they belong; and the rambler in wood or field is surprised when told that this or that flower he has brought home is related to the gorgeous and curious plants he has admired in some hot-house. When the Island of Java contains over three hundred species of Orchids, it is but a confession of poverty to state that the sec-

tion of the United States lying east of the Mississippi and north of North Carolina and Tennessee produces fifty-nine species and varieties; but when this area is narrowed down to New England and forty-seven are found in the catalogue of her flora, the provincial pride that de-

votes a special treatise to this little group can be easily understood. My own acquaintance with this rural family was for years what might be called a bowing one; a supposed ability to call its members by name when I saw them and an appreciation of their outward beauty or oddity forming a superficial knowledge with which I was quite content until I began to make a series of sketches of my charming friends. Then, as I observed them more closely in their home, I realized how little one knows about his neighbors, after all; discovered that there were brothers and sisters, cousins once or twice removed, and other relatives I had never seen, and that these apparently guileless folk had tastes and passions deserving the closest study. They actually seem, now that I understand them better,

more like human beings than forms of vegetation, and if we believe the marvellous tales of the wise men as to the dependence of Orchids upon insects; that each part of a flower has its share in the mutual labor; that the spots and fringes, silken curtains and waving banners, strong or subtle odors, are not mere adornments, but necessary to the fertility of the plant and the perpetuation of its race; that there are changes in color and structure, plots and devices to gain their ends, we must confess, I think, that although the Orchids do not spin, they toil with a wisdom and foresight that SOLOMON might have envied."

From the examination we have been able to give this work we conclude that

it is a valuable popular contribution to the study of our native Orchids, and as such is commended to those who desire a pleasant introduction to the examination of the characteristics and habits of the various members of this interesting family. Our New England friends, especially, have a new incentive to become better acquainted with these treasures of their flora. The book is a handsome one in all respects, and is sold for two dollars and a half.

SWEET PEAS FALL-PLANTED.

I will tell you of my success in growing Sweet Peas from fall planted seeds. About five years since I desired the blossoms earlier than I could obtain them from spring planting. I tried planting some in September and succeeded so well I continue each year to grow all I have in the fall, and plant no more in spring in this hot climate. I always put the Peas in warm water six or eight hours before planting, as more of them come up, and come a few days earlier than if planted dry.

I plant them in the open ground in September usually, and when a few inches high, before freezing weather, I transplant into my cold-frame, in good garden soil, three or four inches apart in the rows, and about three rows wide. I set no deeper than they were, and water well, then scatter dry autumn leaves lightly over, not quite enough to conceal the plants, lest they damp off. I put on the sash if there is prospect of severe frost, and all the trouble is over until spring, except to give them air in mild weather and water two or three times during winter, if they need it.

Very early in March they commence growing, when I remove the sash, and do not put it on again unless there is a cold rain, or sleet, or snow, which is seldom here. The plants freeze many times during winter, sometimes for a week or more together they are frozen solid, but not many, if any, are damaged. If they are too close in the spring, or if I want to set some in any other place, I take them up and transplant as early as the soil can be worked.

And now comes the labor of staking. I, having a few hundred, find the easiest way is to put a few small sticks along the row, and take a spool of thread and wind

along and across, in and out, all through the rows, which will do well at first, using longer sticks and twine as they grow, till by the first of May my stakes are six feet high, and my spool of thread is merged into a half inch cord, and all hidden by a dense mass six or more feet tall and two feet wide, and two feet or more of the upper portion of that row is one continuous blaze of most lovely colors; and what is quite as pleasing is the delicious fragrance, which extends for many rods around. I do not allow seed to form, and therefore bloom continues into August, when we get very warm weather, and the bloom is then so small I allow seed to form. I have also taken plants up for trial merely, and kept them in a cellar. They will keep well in a pit if light and air is given them. I have planted in August, September and October, seeing but little difference in time of blooming.

I never had any good flowers on those I formerly planted in spring. They would grow two feet, have a few small blossoms and dry up or stop blooming; some of my neighbors never saw any blooming till I raised them here.—J. SNYDER, *Cobden, Illinois.*

PASSIFLORA—CRAPE MYRTLE.

I see by the October MAGAZINE that W. C. B. inquires as to the hardiness of *Passiflora cœrulea*. In reply would say that very particular directions as to the cultivation of this plant can be found in volume 3 of this MAGAZINE, page 239. As far as my experience with the plant has extended, I would say that I consider it as very doubtful if the plant would survive the winter in this latitude. If the plant was grown in a sheltered situation and well mulched with leaves or litter, it might possibly survive if the winter happened to be mild; and the best course your correspondent can pursue will be to take the plant up before severe weather sets in, and winter it in a dry, cool cellar. If the plant is given a deep, well enriched soil, and a little care as to watering and training its shoots, it can not fail to do well in the situation referred to.

And let me suggest a little different treatment for Mrs. E. J. Cook's Crape Myrtle, page 311. Let her turn the plant out of its tub, and reduce the bulb of

earth as much as possible without injuring the larger roots, and then plant it out in a well enriched, deep soil, and during the summer season supply liberally with water. Plant out about the end of April, and take up before severe frosts. Before planting out, trim off all weak wood. Try this treatment for a couple of seasons, if you are certain your plant is a Crape Myrtle. — CHARLES E. PARNELL, *Queens, L. I.*

IRRIGATION ESSAYS.

After the very warm weather and the drought that has been sustained in many parts of the country the past summer, the discussion of the subject of irrigation is peculiarly appropriate. The article on this subject in this number is one of several received last spring, in competition for a prize that had been offered for the best essay in answer to the question: "Is irrigation for gardens and small fruit crops of any particular value in that part of the country east of the Mississippi River?" The committee to whom these essays were referred for examination and decision reported, as was announced on page 128, "That none of them offer sufficient facts upon which to base the conclusion arrived at in most of them, that irrigation is of particular value in that part of the country east of the Mississippi River; nor, if that conclusion be admitted, are they sufficiently comprehensive in regard to the methods to be employed to make the practice generally available." Notwithstanding, these essays are of interest, and the facts, at least, which are stated may be of importance to our readers. One writer claims that irrigation is of no practical value in this region of the country, and in our next number this paper will appear.

PASSION FLOWERS.

I have been very much interested in all that has been published concerning Passion Flowers, but I think, in many sections, those kinds which have leaves about the thickness of the wild one, *P. incarnata*, will be all eaten off about the middle of the summer. Every leaf was eaten off my *P. incarnata*, commonly called May-pops; Buist's Hardy, a hybrid of *P. incarnata*, was also all eaten up; *P. cœrulea* is now swarming with caterpillars, while *P. trifasciata* and *P.*

Smithii suffer to some extent. My *Passiflora Fordii*, on the other hand, is unattacked, and though it is too susceptible of frost to be grown much north of this place in the open, it is a wonderfully handsome and rapid climber. *P. alata* appears equally satisfactory, but I have not had it so long. All Passion Flowers appear to be rank feeders and too apt to run at the roots. I think there are many climbers preferable to Passion Flowers, for instance, the Banksian Roses, some of the Noisette Roses, like *Jaune Desprez*, which has almost evergreen foliage, *Clematis Flammula* and *C. montana*, *Cotoneasters*, and many things which are grown in England, but hardly mentioned in the catalogues here. I think it a pity nurserymen don't make up collections of plants for different sections of the country, so as to make floriculture more popular. — BOSANQUET, *Leesburg, Fla.*

A FAMILIAR HAND SHAKE.

I have been an interested reader of the MONTHLY ever since it made it first bow to the public. I specially enjoy the correspondence, and should be as loth to give up my MONTHLY as SUSAN POWER. I would like to shake hands with her, with the editor's permission, across the pages of the MONTHLY. I enjoy her letters very much, but feel constrained to correct her a little. In the July number, page 207, she says, "Around Boston, with all its high floriculture, the spicy flowering Currant is unknown," and so on. Now, sister SUSAN, you certainly have not peeped into all the nooks and corners around Boston, for I can take you where you can inhale the spicy fragrance of more than one flowering Currant in the spring time. More than that, a friend of mine bought of a traveling agent, claiming to come from Rochester, New York, five shrubs with long Latin names attached to the labels; when they bloomed, last spring, they proved to be flowering Currants. It seems they have a few left in New York, if they have not sent them all here. The old, white, climbing Rose, she speaks of, still blooms in my garden, and I see the Snowberry quite frequently in different places. The old-fashioned flowers are not all gone yet, although not as common as they should be.

I work in my garden, although it faces the street. I wear a calico dress as near

dirt color as I can get, a big hat, and keep my back to the street. I never see any body, so I am not annoyed like *PEN-LOPE PEPPER*.

I must not close without speaking of the lovely seedling *Verbenas* we have had this summer. Some single blooms measure a good inch across, and the trusses over four inches, while the leaves are an inch wide by two in length. *Drummond's Phlox*, dwarf *Stocks* and many others have done finely.—*M. J. PLUMSTEAD, Lynn, Mass.*

A GARDEN JOURNAL.

November 1. Taking up *Endive*, with good balls of soil, and planting it in cold-frames, where only a few heads are tied up at a time to blanch; left untied they keep much longer without rotting. What will serve very well, is to throw over the plants a few inches of dry leaves or straw, and the plants will blanch and keep a long time if the frost does not reach them; they should be kept quite dry while thus covered, or they will quickly rot.

2, 3 and 4. Lifting *Beets*, *Carrots*, *Par-snips* and *Salsify*, and storing them in the root-house, piling them up nicely, and covering them over with soil. Vegetables put away in this manner keep fresh and firm all winter. Fresh air can be admitted to them every day when the weather is not too cold, even a little frost will do no harm in the root-house, if the roots are covered with soil.

6. Putting *Cabbage* in cold-pits, covering them at present very lightly with soil, but which will be increased when severe weather is expected.

7 and 8. Taking up *Chicory* and *Artichokes*, and burying them in the root-cellar.

9. Planting in beds the bulbs of *Hyacinths*, *Narcissus* and *Tulips* that bloomed in pots last winter in the greenhouse.

10. Pruning *Currant* bushes.

12. Taking in the *Grapes* from the cold-grapery, and tying the bunches separately, to hang from poles which rest on shelves on each side of the cellar. The poles are about five feet high from the floor, a convenient distance to allow one to examine the fruit every few days, and to remove any decaying fruit.

13 and 14. Taking up *Celery* and storing it in the root cellar, standing the plants upright, closely together, in rows

about six inches apart, and filling the spaces between with soil to a height about the same as they were earthed up outside. Some *Endive* that was tied up has been lifted and packed away in cold-frames.

15. Bending down and fastening the *Fig* trees, and covering them for the winter.

16. Covering *Hybrid Perpetual* and all half-hardy *Roses*. The bed of *Azalea mollis* and the *Ghent Azaleas* has been thoroughly covered up with leaves; the other *Azaleas* and the *Rhododendrons* are securely wrapped and tied with straw.

17 and 19. Giving a good covering of manure to the outside border of the cold-grapery.

20. Planting trees of the *American* and the *Spanish Chestnut*.

21 and 22. Removing trees and shrubs on the lawn.

23 and 24. Taking out some old *Pear* trees and filling the places with others of choicer varieties.

26. Potting *Geraniums*, the cuttings of which were put in the 3d of last month.

27 and 28. Spading the garden ground.

MADEIRA VINE NOT BLOOMING.

Will you please tell me what is the cause of *Ma-deira Vine* not blossoming? Mine grows luxuriantly, but never blossoms. Last winter I kept one of them until spring, hoping it would blossom. What can be the reason? I have tried them both in the house and in the garden.—*G. M., Oak Bank, Mani.*

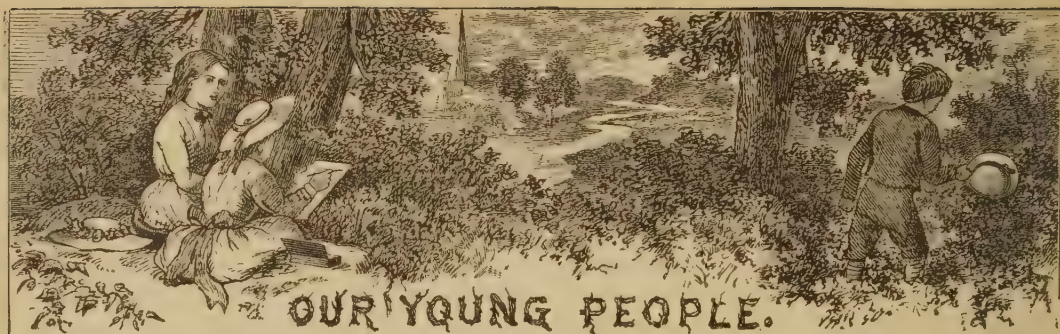
Bulbs of this plant for blooming in summer should rest during winter. Keep them in the cellar, free from frost. Plant in the spring in good soil in a sunny spot, and train the vine on strings as it grows; in autumn it will produce its little fragrant flowers.

TUBEROSE—KEEPING FEVERFEW.

L. C. B., Chenoa, Ill., your *Tuberose* that has bloomed is not worth preserving. Its work is done.

The plant of double *Feverfew* can be kept over winter in the ground where it now stands. Give it a covering of leaves before the weather becomes very cold, and it will be safe and sound in the spring. Even without a covering it would probably survive.

GROWTH.—In all the vegetable kingdom I know of no quality better than this, growth—nor any quality that will atone for its absence.—*GAIL HAMILTON.*



OUR YOUNG PEOPLE.

"THE GRAB-APPLE CLUB."

"I kin chaw as well as ever, but I kint swaller."

Thus spoke a miserably wretched feeling youngster while sitting, one evening, in the pleasant study of Rev. Mr. Parsons. He held in his hand a large, mellow Pear, from which one small bite only had been taken. Now, it is so unusual for a strong, healthy boy of ten years, blessed with a voracious appetite, to find himself suddenly unable to swallow, that a short story, by way of explanation, will be in order, to account for the alarming condition of Jimmy Day's throat on this particular evening.

In the village where Jimmy lived was the usual class of mischievous boys, a few of whom stopped little short of actual crime in their determination to secure for themselves whatever indulgence happened to be the coveted thing for the time being. The oldest and most influential of this set was Tom Day, little Jimmy's brother. For several months prior to the time of our story there had seemed to be such concerted action among these scamps as to puzzle the citizens whose berries and melons and Grapes and tree fruits disappeared in turn in the most mysterious manner.

The jolly, good-hearted Dr. Belton had two or three dozen Peach trees in a back lot, now in their second year of bearing. At first he had only intended planting two or three trees each of early and late kinds for family use; but on second thought had said to himself, "I'll get no fruit at all unless I plant four or five for the thieves to one for myself." And this he had done. Now his early crop was ripening, and he was greatly disturbed to find that the miscreants were not only taking the fruit, but breaking down large limbs at a rate that would soon ruin the

trees. Then the Doctor fell to thinking and talking; talking to himself was a fixed habit when alone and perplexed. But if he were driving his nag, "Nancy," he told all his plans and perplexities to her. So, whether in his sulky along the highways, or in the village along the byways, everywhere, except in the sick room, he was pondering how he could get the better of these young rascals without peppering them with shot. At last he thought of a plan that was sure to work to a charm. "Egad, I've got it now," he said to himself.

"Barbed-wire fence?" No, indeed, the Doctor had never heard of such a fence. "Did he tar the trees?" No, he did not think of that; besides it would not have proved a remedy for his trees.

The Doctor was so elated over his new idea that, as he rocked along toward home in his swaying sulky, he bobbed his head at the Elderberry bushes and winked at the Golden-rod, while he assured them, confidentially, that now he had hit upon the very thing; just the very thing.

"Yes," he went on, "and I'll make 'em like me, too; yes, every last one of 'em, Tom Day, and all. They can't steal any more for very shame, of course, they can't, can they, Nancy? Get up! let's hurry on home; we'll make 'em a little speech, too, wont we, Nancy? of course, we will. Wonder we hadn't thought of all this before; what makes us so stupid, Nance? You get the slows and then I get the slows, only when pills and powders are to be given, we can think fast enough then, can't we, Nance? Did, to-day, any how. Gracious! how that boy cramped and vomited! Cousin of Tom Day's, eh? 'Been to town, staying with Tom,' his mother said. Threw up Peaches, yellow ones, I know the kind;

I'll wager my hat full of picayunes they came off my trees, of course, they did. Gee up, Nance. We didn't give him any thing to make him go on vomiting, did we? of course, not, that wouldn't be right, Nancy; wouldn't be right. Just enough to make sure of the bottom Peach; that was all he needed, all he needed, Nancy, you know it as well as I do. Gee up. Ah, yonder goes a couple of the very fellows, regular night-prowlers. Now, listen, Nance, how sweet I'll talk to 'em; whoa, whoa."

"See here, boys," continued the Doctor, "I'm going to give you village chaps a treat, and I want you to pass the word around, and all of you be on hand at my office door to-morrow morning at nine o'clock, sharp. The last two days and nights of rain have ripened lots of Peaches, and they've not been gathered in as usual. (The boys exchanged glances.) But I'm going right home to see to it now. There'll be more than I can use, and I don't intend to let them rot when there are so many fruit-loving boys around. If you don't all get your pockets and hats and stomachs full for once, it won't be my fault."

* * * * *

The next morning there was a curious-looking medley of urchins gathering by twos and threes and in squads in the vicinity of the Doctor's office. An interested looker-on might have told which were the guilty ones, for they instinctively held back, while those who were innocent of fruit-stealing pressed forward with pleased, expectant faces. Directly the door was thrown open, and the Doctor's beaming face appeared.

"Good morning," he sang out, "but what's up? have you come to mob me, or do you want to get vaccinated?"

"You said you'd treat us to——."

"O, yes, yes, yes, yes; I remember," and pulling a couple of bushel baskets well rounded up with Peaches toward the doorway, he continued, "Come on, you fellows, over yonder; what are you hanging back there for?" and the hearty ring of his voice, added to the display of fruit, brought the most laggard ones forward. Then, looking them all over, he said, "Are you all here? Where are Sam Peters and Dick Sheppard, and Tom Day?"

"They wouldn't come," answered several voices, while a youngster piped out,

"I s'pose they think themselves too big, they're fifteen years old."

"O, well," said the Doctor, "you boys can take their share to them, which will suit them better, perhaps. We'll have a first rate good time here without them, directly. But first, I want you all to look me right in the eye, in the eye, boys, and listen! You all expect to be men, some day, real, live men, and you'll want to raise some fruit for yourselves, like other folks, of course, you will; if you've only room for a Grape-vine, you'll want one. Just give it standing room and feed it a little, and it will climb up out of your way and set up its workshops and trap in the rain, dew and sunshine, with no let up, day or night, until the luscious globes of juice and pulp are fit to burst with richness, ready for you to gather in, to gather in, boys, unless somebody has sneaked around and done it for you, and torn down your vine besides, in their haste to get them, the vandals! very likely ruined your vine, so there'll be no Grapes the next year, for you nor them either. And besides stealing your fruit they've destroyed your property. A fruit-bearing vine or tree is worth a lot of money, a lot of money, boys; and you'll have to play sharp and get the cue on such rascals, so's to bring the law to bear on them for destroying valuable property, valuable property. If it were Peach trees they broke down for you, boys, I expect you'd get mad, and begin to think about lying in wait with a shot gun. If you ever do that, and you may have to, shoot low, boys, shoot low; you'll only want to mark 'em, so's to tell who they are by daylight. And now hold out your hats and stretch open your pockets. Aren't they beauties? Don't crowd; there are plenty more back in here; enough for all, for all, and more, too."

On the evening of this same day, the Rev. Mr. Parsons discovered, under a Pear tree in his back yard, a little fellow standing on tip-toes, with up-stretched arms, "boosting" another boy into the tree. The dominie stepped softly to the tree, and while one boy took to his heels he grasped the arms of the other one, and placing him firmly on one shoulder, walked into his "study" with the culprit, and set him in a chair, bidding him be quiet, or there might be trouble. Now, Jimmy Day was as "fraid as death" of

preachers, any way, bad boys always are, and to be captured by one while so wickedly engaged, and carried off to his den, where every book looked like a bible, and every paper a sermon covered over, inside and out, with "Thou shalt not steal," was the most terrifying thing that could possibly have happened to Jimmy Day. But it did happen exactly as here related.

After Mr. Parsons had eyed his prisoner a moment, pitying his fright, though enjoying the situation, he took a fruit basket from the top of his desk, saying, kindly,

"If you wanted Pears, my boy, why didn't you come and ask me for some, like a man? Here, help yourself." But Jimmy didn't want any; he'd lost his appetite for Pears. Still, Mr. Parsons insisted, but the boy only shook his head. "If you want to get away from here to-night, do just as I tell you," Mr. Parsons said. "Now take this Pear, and eat it." So Jimmy took the Pear and forced himself to take one bite, but that was all, and even that he slipped out of his mouth directly, and threw under his chair. Then Mr. Parsons said,

"That's a delicious, great, mellow Pear; why don't you eat it?" And then it was that Jimmy answered,

"I kin chaw as well as ever, but I kint swaller."

Mr. Parsons was seized with a violent fit of coughing to cover the burst of laughter which almost got the better of him. Then he said to Jimmy,

"Well, if you can't 'swaller,' you can't. Now, I'm going to fill your hat with these nice Pears, and some other time you can enjoy them better than now. And just as soon as you have told me everything you know about the gang of boys, of which your brother Tom is leader, I'll let you go home, and not before." Then he began to cry.

"I kint tell," he said, "for if I 'blow' on 'em, Tom'll lick me to death."

"But Tom will never know it. No one shall ever know you told me anything. You see, you and I are to be good friends after this." Then Jimmy caught a new idea, and looking up, said,

"I kin trust you, kase you've promised not to 'blow,' and preachers daren't lie. Well, we little boys, Tony Peters and Bobbie Shepperd and me, we listens when the big boys has their meetings. They calls theirselves the 'Grab-Apple Club,' and they mostly meets in the school

house, without no lights. They crawls in a back window, and huddles up in a corner, and Tom, he's Pres'dent, an' tells 'em where to go and what to do. He and Sam Peters and Dick Shepperd are mad at the other boys for letting Doc. Belton treat 'em, this morning; and Tony an' me didn't git to go, kase our brothers wouldn't let us. I heard Tom tell Sam he was going to call a Club meetin' for to-morrow night, and give it to the other fellers for lettin' Doc. Belton be so soft on 'em. And this is all I know about it. May I go home, now?"

"Yes, if you'll come and ask me when you want anything I've got." Jimmy promised he would, and left with a heart as lightened as if he had barely escaped the jaws of death.

The next evening three men were concealed by the darkness in a back room of a certain school house, while outside was a fourth one, officially armed with a warrant for the arrest of the fatherless Tom Day, if anything could be proven by present witnesses to justify such action. The three leading boys of the Club seemed to be the only ones present. Shortly the hoarse, angry whisper of the President could be heard, as he threatened vengeance on the boys who had dared be absent that night, and laid plans for the further mutilation of the Doctor's Peach orchard, to show him, he said, that they couldn't be bought off so easy.

This was enough, though there was more of the same sort, and Mr. Peters started for the Club corner, shouting that he would give Sam a touching up with a genuine Crab-Apple club, and that he had the club with him ready for use. There was a leap to the window, but a strong man outside forced each one back as he tried to escape. When Tom found he was to be arrested, he resisted so furiously that hand-cuffs were placed upon him, and he was walked off between two men, while the other two followed their guilty sons home.

Thus it was that the "Grab-Apple Club" was broken up, to the great delight of the younger members, who had decided that it is better to be treated to fruit, or even to ask for it, than to steal it. All of which Dr. Belton confided to Nancy the first time he found himself tilting between two wheels behind her.—AUNT MARJORIE.



LATE AUTUMN.

At the approach of winter all vegetation rests; most trees shed their leaves, and those that retain them, such as Pines, Firs, Spruces, &c., and such shrubs as Kalmias, Rhododendrons, and other broad-leaved evergreens, make no growth. But in the tropics we find that

the trees make all their growth in one part of the year, and rest the remaining time; instead, however, of growing during the warmest months, they make their growth in the rainy season, and rest during the dry and hottest time, consequently the greatest growth occurs both in the tropics and in the temperate

zones when the conditions of temperature and moisture are most nearly alike. But the term of growth of most woody plants is much shorter than it at first appears. The time of active growth of nearly all trees and shrubs is measured at most by a few weeks, and of some, notably the Horse Chestnut, by a few days, for the lengthening of all its shoots is accomplished in less than a fortnight. Most trees in this latitude make their growth between the middle of May and the middle of July, after this the new shoots become firmer and harder, and undoubtedly new material is being stored up in the tissues until the leaves fall. During all this time the fruits and seeds are increasing in size and solidity, and reach their maturity before or at the fall of the leaves. The illustration of an autumn scene, here presented, will probably suggest nutting excursions to many young readers, older ones it may remind of hunting trips as well as of the pastimes of more youthful days, and to all it bears associations of gathered harvests, of cellars stored with fruit, and garrets with nuts, of the moan of the wind that presages winter's advance, and that day of all the year, Thanksgiving day, when nearest kindred and friends meet in sweet fellowship. The rapidly changing and variously commingled hues of vegetation of the late autumn have a charm to which few are insensible. LOWELL, in *An Indian Summer Reverie*, beautifully describes the appearance of some of our forest trees :

* * * * *
And all around me every bush and tree,
Says, Autumn's here, and Winter soon will be,
Who snows his soft, white sleep and silence over all.

The Birch, most shy and lady-like of trees,
Her poverty, as well she may, retrieves,
And hints at her foregone gentilities
With some saved relics of her wealth of leaves;
The Swamp Oak, with his royal purple on,
Glares red as blood across the sinking sun,
As one who prouder to a fallen fortune cleaves.

He looks a Sachem, in red blanket wrapt,
Who 'mid some council of the sad-garbed whites,
Erect and stern, in his own memories lapt,
With distant eye broods over other sights,
Sees the hushed wood the city's flare replace,
The wounded turf heal o'er the railway's trace,
And roams the savage Past of his undwindled rights.

The Red Oak, softer grained, yields all for lost,
And, with his crumpled foliage stiff and dry,
After the first betrayal of the frost,
Rebuffs the kiss of the relenting sky;
The Chestnuts, lavish of their long-hid gold,
To the faint summer, beggared now and old,

Pour back the sunshine hoarded 'neath her favoring eye.

The Ash her purple drops forgivingly
And sadly, breaking not the general hush;
The Maple swamps glow like a sunset sea,
Each leaf a ripple with its separate flush;
All round the wood's edge creeps the skirting blaze
Of bushes low, as when, on cloudy days,
Ere the rain falls, the cautious farmer burns his brush.

In a similar strain BRYANT sings of *Autumn Woods*, from which here are a few selected stanzas :

My steps are not alone
In these bright walks; the sweet southwest, at play
Flies, rustling, where the painted leaves are strown
Along the winding way.

* * * * *
Let in through all the trees
Come the strange rays; the forest depths are bright;
Their sunny colored foliage, in the breeze,
Twinkles, like beams of light.

* * * * *
But 'neath yon crimson tree,
Lover to listening maid might breathe his flame,
Nor mark, within its roseate canopy,
Her blush of maiden shame.

The Voice of Autumn he commences with this representation of sight and sound :

There comes from yonder height,
A soft repining sound,
Where forest-leaves are bright,
And fall, like flakes of light,
To the ground.

FLOWERS AND INSECTS.

I have been thinking for a long time of writing a letter to your MAGAZINE. Although I am young, yet I enjoy it very much. The picture of "Wayside Beauties," in the October number, is to me beautiful; there are a great many of those flowers growing around here. I go out, in summer, and gather a large bouquet nearly every day. I think wild flowers are very pretty, and we have such a variety around here; we gather flowers like those in the picture quite frequently. I have a great many cultivated flowers, also. And the article about "Moths and Butterflies," I like very much. I am getting a collection of bugs and butterflies. I have twenty-five different kinds of butterflies, and fifty different kinds of bugs; some of my butterflies are not as brilliant as others, but they are all very fine specimens. My cousin gave me one, and it was the largest I have ever seen; it measured three inches across its wings, and its body was as large as a person's finger, but while I was away visiting, this summer, my little brothers got it out of the glass case and broke it up, but I saved the body. I think everybody ought to love flowers. When I grow old I expect to have them in every nook and corner. I read of so many new varieties in your MAGAZINE, and wish I could see them. This is the first letter on this subject I have ever written, and I must not write too long this time.—NANNIE CHENEY, *So. Charleston, Ohio.*

We shall always make room for letters from the young folks when they write as well as our young friend has above, and we are pleased to hear from them what-

ever they may have to say. The practice of preserving specimens of insects and plants is a very valuable one, and if the writer above will continue in this course a few years her interest will be stronger and keener as her knowledge is increased. In many cases it may not be possible at first to learn the proper names of specimens, whether plants or insects, but they can be kept and numbered, and a record made of the place and time of collecting, and the attendant circumstances, writing out fully all that is positively known about them, and guessing at nothing. In time the names of most of them at least, in some way, will be discovered, and the information acquired will prove of much value in many ways, and the habit of observation formed while young will last through life, enhancing the enjoyment of nature, and proving a continual good.

PRIZE ESSAYS FOR 1885.

The prizes offered for Essays, last year, resulted in the publication in our pages of some of the best thoughts on horticultural topics of persons practically engaged in the operations of which they wrote, and this kind of information is what is most needed. We again take this method of calling out the most valuable and reliable experience on subjects that will interest a variety of readers.

For the best well written article on each of the following subjects, we offer to pay in seeds and plants selected from our FLORAL GUIDE, the sums as respectively stated.

1. What agencies and methods can the residents of villages employ to secure the practical effects of the most advanced ideas of sanitation, and the proper horticultural embellishment of streets and grounds? Twenty-five Dollars.

2. How can the Rose be best managed as a house plant, and what varieties are most suitable for that purpose? Twenty Dollars.

3. How can Asparagus be best and most economically raised for market, and what are the details of cultivation, gathering, packing and marketing? Twenty Dollars.

4. Is the Blackberry a profitable fruit, and, if so, what varieties, and with what processes of cultivation and marketing? Twenty Dollars.

5. What varieties of Peas are most profitable for the market gardener, and what most desirable for the table, and what are the best methods of cultivation in each case? Twenty Dollars.

6. What practices can be most successfully employed to secure the Apple orchards from the codlin moth? Twenty Dollars.

7. Is the Mushroom, any where in this country, raised extensively for market, or can it be so raised to advantage, and, if so, in what manner? Twenty Dollars.

8. What salad plants are most desirable, and by what manner of cultivation can a family be best supplied with them from a private garden? Fifteen Dollars.

9. What annual flowers can be satisfactorily used

in winter window gardening, and how are they best managed? Fifteen Dollars.

10. What is the best method of treatment in the propagation and cultivation of the Cyclamen to secure fine blooming plants? Fifteen Dollars.

11. How can the finest pot-plants of Chrysanthemums be raised, and what varieties are desirable? Fifteen Dollars.

12. How can amateurs without greenhouses keep up a winter supply of Violets and Pansies? Fifteen Dollars.

Competitors on the subjects relating to the Blackberry, No. 4, and annual flowers, No. 9, should send their manuscripts so as to be received here not later than the first day of January; all others should be here by the first of March. Committees of at least three persons each, selected for their competency as judges on the various subjects, will decide on the merits of all contributions and award the prizes.

The prize communications will in due time be published, and those not accepted will be at the disposal of the writers. Those wishing unaccepted articles returned will please so state, but any left in our possession will be examined, and anything of special interest will be published, giving the author credit. Announcement of prizes will be made immediately after the awards.

CHOICEST OF JEWELS.

"The MONTHLY MAGAZINE you send me is more interesting for each month. The September number is crowded with the choicest of jewels. It is eminently a floral sunbeam for every household."

The above is only a sample of thousands of cheering expressions we are constantly receiving from our readers. Our work on this volume is nearly completed, and the time is fast approaching for subscriptions for the year 1885. We need make no promise for the MAGAZINE hereafter; its conduct in the past must be its guarantee for the future; it shall not retrograde, and our aim is to advance. The interests of its readers and the inspiration of a love of gardening among the people will ever be its guiding motives. With these purposes so well understood and appreciated by the public, we have no fears that our subscription list for the coming year will show a falling off; but we desire its extension, and, consequently, do not hesitate to ask the personal influence and assistance of every subscriber in introducing and recommending the MAGAZINE to friends and neighbors.

Our arrangements with *Good Cheer* will be the same next year as it has been the present, and it is a pleasure that we can offer the MAGAZINE, the most popular garden journal in the country, and *Good Cheer*, the best family paper of pure, instructive and entertaining literature, for one dollar and twenty-five cents, the single subscription price of the MAGAZINE. No one need hesitate to mention this fact to his friends, it will be a real service. We shall hope for a good word from each reader, and whatever help can be given in increasing our subscription list of 1885.

BINDING THE MAGAZINE.

We will bind the MAGAZINE in nice cloth covers for 50 cents, and return the book, with the postage or expressage prepaid by us. If subscribers will send us the numbers in season, we will have the volume bound and returned, if possible, before the Christmas holidays. Please give your name on the package when sent, that we may know to whom it belongs.



A BOOK FOR THE CHILDREN.—The gems of poetry that occasionally find a place in our pages over the signature of MARGARET EYTINGE, and the literary name, MADGE ELLIOTT, have enabled our readers to form an opinion of the ability of the writer better than any words of commendation which we might offer. The art of personification is practiced by this author in a remarkable degree, and with the happiest effect in writing for children. A volume of her stories lying before us would prove a treasure to any intelligent child. Its title is, *The Ball of the Vegetables, and other Stories, in prose and verse*. In the first story, or *The Ball of the Vegetables*, the different garden vegetables are all present at a ball, but not as vegetables, each one is personified and exhibits in behavior and conversation its peculiar qualities. Here are Queen Squash and King Pumpkin, Asparagus Guards, Captain Corn, Miss Carolina Potato a Southern belle, General Tomato, Lady Lima Bean, Miss Cauliflower, Mrs. Onion; the Turnips, who always take longer to prepare than any other vegetables, made their appearance about eight o'clock, bringing with them a German cousin, whom they introduced as Count Kohl Rabi. He was a bluff, honest-looking fellow, and pronounced every thing he saw, "Vary goot! Vary goot!" But our space will not allow any extended quotation of the interesting and amusing conversations; it must be read as a whole. The names of a few of the other stories are these: The Silly Lace Handkerchief, The Red Morning Star Locomotive, Another Rip Van Winkle, Young Jack's Story, The Mouse's Opinion, The House That Grew in a Cellar, What the Rose told the Butterfly, &c., seventy stories in all, with twenty-five beautifully engraved illustrations. The book, an octavo volume of two hundred and fifty pages, is throughout of the best execution, and is a credit to all connected with it. It is published by HARPER & BROTHERS, of New York, at \$3.00. It is a handsome and delightful gift book for the holidays.

THE SURGEON'S STORIES.—These stories are a series of Swedish historical romances in six cycles, each cycle comprised in a volume, and complete in itself, though in the closing volume the threads of all the stories are united and brought to a fitting close. They are written by Z. TOPELIUS, Professor of History in the University of Finland. The first cycle is the "Times of GUSTAF ADOLF;" following it is "Times of Battle and Rest," relating to the times of CHARLES X and XI; then "Times of CHARLES XII;" "Times of FREDERICK I;" "Times of LINNÆUS;" and "Times of Alchemy." These stories strongly remind one of Sir WALTER SCOTT's historical tales; they are extremely fascinating, and there is an air of naturalness about them that allows of no thought of fiction, every character and scene is life-like and real. While they teach history in a pleasing manner, the impressions received will be ineffaceable. In the "Times of LINNÆUS," the great naturalist is a central figure, and the representation of him is vivid and interesting. These stories will have many delighted readers, and will prove to be of an enduring character, holding a fixed and lasting place in popular literature. They are published by JANSEN, MCCLURG AND Co., of Chicago, Illinois, at one dollar and twenty-five cents a volume, or the six volumes in box for seven dollars and fifty cents.

DO NOT DELAY.

During this month and the next the subscriptions for nearly all the periodicals in the country are made up. Now is the time to introduce to your friends VICK'S MAGAZINE; each subscriber will receive in addition a copy of *Good Cheer*, or he will be able to take advantage of our low terms to secure other periodicals, a full list of which appears in our advertising columns.

SPECIAL TERMS TO AGENTS.

Parties desiring to act as agents in getting subscribers to the MAGAZINE will be given special rates on application. There is a chance for enterprising canvassers in this work, and it will be to the advantage of some one in every locality to send for our terms to Agents; Postmasters, especially, should apply.

BOUND VOLUMES.

Bound volumes of this MAGAZINE make splendid and useful holiday presents. We can furnish volumes from the commencement—1878-79-80-81-82-83-84—for \$1.75 each, or the seven for \$10.50. We will prepay the express charges. Bound volumes for 1884 will be ready by the 10th of December.

VICK'S FLORAL GUIDE FOR 1885.

Our FLORAL GUIDE for 1885 will be ready to commence sending out in December, though it will be the middle of January before all are mailed. We design to send it to every subscriber, but if any should be accidentally omitted, please notify us by postal card.

NOT A BAD HOLIDAY PRESENT.

A subscription to our MAGAZINE would not be a bad holiday present. Our price is so low that we do not feel as though we were pleading our own cause when urging people to subscribe.

CLOTH COVERS FOR MAGAZINE.

We will furnish elegant cloth covers for the MAGAZINE, for 25 cents each, and prepay postage. Any bookbinder can put on these covers at a trifling expense.

THE MAGAZINE IN CLUBS.

The MAGAZINE will be sent in clubs of five or more at one dollar a year for each subscriber.

ST. LOUIS MAGAZINE.

RECOGNIZING the superior excellence of the St. Louis *Magazine*, we have arranged to furnish it in connection with VICK'S ILLUSTRATED MONTHLY at the low price of \$1.75 a year for both publications, the St. Louis *Magazine*, under its enlarged and improved condition, being \$1.50 a year alone. The new editor of this periodical, Mr. ALEXANDER N. DEMENILL, is making it the best magazine of its price in the world, and we would not make this offer were we not satisfied with its excellence. Those wishing to see a sample copy, including a beautiful set of gold colored picture cards, before subscribing, should send 10 cents to the St. Louis *Magazine*, 213 North Eighth Street, St. Louis, Mo., or send \$1.75, either to JAMES VICK, publisher of VICK'S ILLUSTRATED MONTHLY MAGAZINE or the St. Louis *Magazine*, and receive both publications for one year.